

Begin

Reel # 456

Radyvanyuk, A.

REDAVANTUR, ..

International Conference on Scintillation Counters for the Re-
cord and Spectral Measurement of Nuclear Radiation. 1968.
energ. 17 no.4:310-315 0 10% (MTP: 17:10)

L 33184-66 EWT(1) IJP(c) AT

ACC NR: AR6016168

SOURCE CODE: UR/0058/65/000/011/G017/G017

AUTHORS: Baldin, S. A.; Matveyev, V. V.; Radyvanyuk, A. M.; Sokolov, A. D.

7/
B

TITLE: Development of apparatus for the investigation of high-temperature plasma by means of penetrating radiation

SOURCE: Ref. zh. Fizika, Abs. 11G133

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 182-198

TOPIC TAGS: plasma diagnostics, high temperature plasma, x radiation, neutron radiation, plasma magnetic field, RADIATION COUNTER, RADIATION SPECTROMETER

ABSTRACT: The fundamental problems are considered in connection with the development of electronic-physics apparatus for the diagnostics of high-temperature current plasma by registration and spectrometry of the hard x-ray and neutron radiations. The requirements imposed on the apparatus and also the testing of the apparatus are investigated on the basis of the operating conditions of toroidal installations with strong magnetic field. [Translation of abstract]

SUB CODE: 20

Card 1/1 MC

L 60360-65 ~~ENT(m)/ENT(1)/ENT(b)/ENT(t)~~ IJP(c) JD

ACCESSION NR: AP5018314

UR/0057/65/035/007/1312/1318

AUTHOR: Ivanovskiy, G. F.; Radzhabov, T. D.

TITLE: Adsorption of argon ions by titanium films, 4

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 7, 1965, 1312-1318

TOPIC TAGS: adsorption pump, titanium, argon, ion, metal film, adsorption, desorption

ABSTRACT: The authors have investigated the adsorption of argon ions on freshly deposited titanium films, regenerated films, and on films that were continuously deposited during the adsorption. The investigation was undertaken because of the technical interest of such adsorption in connection with gettering type ion pumps. The 15 liter measuring chamber was evacuated to better than 5×10^{-9} mm Hg. The titanium films were deposited at from 10 to 50 A/min on a 3 cm diameter copper base. A beam of up to 10 microamperes of 0.6 to 4.0 keV monoenergetic argon ions was produced by a magnetron type source and directed onto the film. The diameter of the beam at the target was 3 cm. After the adsorption, the titanium film was heated and the desorbed argon was measured. The desorption curves from films that were deposited before they were bombarded showed two maxima, at about 300

Card 1/2

L-60360-65

ACCESSION NR: AP5018311

and 500°C. The films that were bombarded during deposition showed these two maxima and, in addition, a third rise due to evolution of gas beginning at about 700°C and extending to the melting point of the copper base. Considerably more argon was adsorbed when the film was bombarded during deposition than when it was bombarded only afterward. The quantity of argon adsorbed increased with increasing ion energy at low ion energies, and reached a broad maximum at an ion energy of about 2.5 keV. Adsorption coefficients up to 46% were observed. The experimental results were in good agreement with the theory of A.D. LeClaire and A.H. Rowe (Rev. Metall., 52, 94, 1955). The high-vacuum deposited titanium films did not adsorb neutral argon that was admitted to the chamber with the ion source inoperative. Orig. art. has: 1 formula, 7 figures, and 2 tables.

ASSOCIATION: none

SUBMITTED: 17Sep64

ENCL: 00

SUB CODE: IC, CC

NO REF SOV: 002

OTHER: 007

Card ^{KE} 2/2

USSR / Plant Physiology. Photosynthesis.

I

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34225

Author : Radzevenchuk, I. F.

Inst : Leningrad Agricultural Institute

Title : On the Carotene and Xanthophyll Contents in Perennial Rye.
Zap.

Orig Pub : Leningr. s.-kh. in-ta, 1956, vyp. 11, 240-244.

Abstract : Contents of carotene and xanthophyll in a whole plant - according to a modified method of D. I. Sapozhnikov (Experimental Botany, 1951, No 3) - were ascertained. Before taking a test sample, a vegetative cone was prepared and examined under binocular magnifying glass. A choice of test samples was made from September 23 to November 11 and from April 29 to July 11. The content of pigments and relationship of carotene to xanthophyll in Derzhavin's perennial rye was intermittently changing according to the degree of growth. Content of xanthophyll in Derzhavin's

Card 1/2

RAO ZEVENCHUK, I. F.

Use of the Gustavson-Friedel-Crafts reaction for the
quality improvement of lubricating oils N. F. Radzev-
chuk. Zhur. Prikl. Khim. 29, 1631-703 (1956). fuel 1
 Alkylation of low-grade petroleum-base oils with chlorinated
 paraffin wax (I) in the presence of $AlCl_3$ improves the vis-
 cosity index of the product. 1 mol. 23% of I yields oils with
 a viscosity index of 83-90, while the use of 39% I gives an oil
 with viscosity index 104. The yield of high-grade oil ob-
 tained in this way is about 85% (based on crude oil), while
 $PhNO_2$ extr. yields only 7-8% of high-grade oil from the
 same crude oil. The reaction was carried out at 60-70°
 during 2 hrs., with 2% com. $AlCl_3$ as catalyst; the oil layer
 was sepd., washed with hot H_2O , and clarified with activated
 clay at 240°.
 G. M. Kozolapov
 gm

RADZEVENCHUK, I. F.

Application of the Gustavson-Friedel-Crafts reaction to the preparation of lubricating oil from extracts. I. F. Radzevenchuk. *Zhur. Priklad. Khim.* 36, 968-71 (1957); *Ch. U.A.* 31, 1688. Alkylation of the furfural ext. from low-grade petroleum lubricating oils with chlorinated paraffin (I) in the presence of $AlCl_3$ yielded an oil with a viscosity index (II) of 41.8, if the starting material contained 23% I and with II 101.7 if it contained 37.71% I. A decrease in the amt. of $AlCl_3$ from 3 to 1.5%, for a reaction mixt. with 13% I, resulted in an oil with II 29.58. Similar oils were obtained by alkylation of a steam-distd. fraction of a heavier ext. Alkylation was carried out at 60° for 2 hrs.; the oil layer was clarified with 10% activated gumbrin at 240° . I. Benozvitz

imb
anf

RADZEVENCHUK, I.F.

Alkylation over aluminum silicate catalyst which was activated
by gaseous hydrogen chloride. Part 1: Alkylation of benzene by
alkyl chlorides. Zhur. ob.khim. 28 no.9:2423-2426 S '58.
(MIRA 11:11)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Benzene) (Alkylation) (Catalysts)

5(3)

SOV/80-32-5-49/52

AUTHOR: Radzevichuk, I.F.

TITLE: The Reaction of Alkylation of Autol Distillate by 6-Chlorinated Paraffin in the Presence of Dry Gumbrine and Gaseous Hydrogen Chloride

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1174-1177 (USSR)

ABSTRACT: It is known that lubricants with low-cyclic hydrocarbons and long side chains have a sloping viscosity-temperature curve, i.e. a high viscosity index and a low density [Ref 2]. The content of paraffin chains in aromatic hydrocarbons may be increased by means of their alkylation with chlorinated paraffin. This reaction is catalyzed by the expensive aluminum chloride. In the article dry gumbrine and gaseous hydrogen chloride are used as catalysts. A preliminary thermal treatment of the clay and the action of the hydrogen chloride on the clay suspension in the alkylating reagents is necessary for the success of the reaction. Gumbrine is dried at 160°C and loses 14.2% of water. The viscosity of

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SOV/80-32-5-49-52

The Reaction of Alkylation of Autol Distillate by 6-Chlorinated Paraffin in the Presence of Dry Gumbrine Gaseous Hydrogen Chloride

the final product is 91.4, i.e. the same value as with aluminum chloride. There are 3 tables and 9 Soviet references.

SUBMITTED: February 6, 1958

Card 2/2

RADZEVENCHUK, I.F.

Alkylation of benzene by propylene and anylene. Zhur.prikl.khim.
35 no.11:2538-2542 N '62. (MIRA 15:12)
(Benzene) (Alkylation)

L 63276-65 EWA(h)-2/EWA(j)/EAT(m)/EAT(l)/T JAJ/RH/RO

ACCESSION NR: AP5015123

UR/0366/65/001/006/1017/1020
542.953.1 : 547.563

26
25
B

AUTHOR: Radzavonchuk, I. F.

TITLE: Alkylation over an aluminum silicate catalyst activated with gaseous hydrogen chloride

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 6, 1965, 1017-1020

TOPIC TAGS: alkylation, aluminum silicate catalyst, hydrogen chloride, phenol, propylene amylene, insecticide, fungicide

ABSTRACT: The alkylation of phenol with propylene and amylene in the presence of dry gumbrin activated with gaseous hydrogen chloride was studied in the hope of synthesizing ortho alkyl phenol derivatives, widely used as insecticides, anti-oxidants, and fungicides. Alkylation with propylene yielded o-isopropylphenol (30% yield). Alkylation with amylene yielded several isomers of anylphenol. The yield of any particular isomer depended on the temperature and concentration of reactants. It is concluded that gumbrin activated with gaseous hydrogen chloride belongs to the ortho-directing class of alkylating catalysts. Orig. art. has: 2 graphs.

Card 1/2

L 63276-65

ACCESSION NR: AP5015123

ASSOCIATION: Leningradskiy sel'skokhozyaystvennyy institut (Leningrad Agricultural Institute)

SUBMITTED: 31Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 011

OTHER: 009

NC
Card 2/2

FRENKEL', Semen Shmulevich, frezerovshchik; RADZEVICH, Sergey Sergeyevich,
nauchnyy red.; KOPTEVSKIY, D.Ya., red.; ROGACHEV, F.V., red.;
RAKOV, S.I., tekhn. red.

[Handbook for the young milling-machine operator] Spravochnik
molodogo frezerovshchika. Moskva, Vses. uchebno-pedagog. izd-vo
Trudrezervizdat, 1958. 459 p. (MIRA 11:9)
(Milling machines)

PA 30/49107

RADZEVICH, YE. N.

USSR/Engineering
Dredges
Construction Equipment

May 48

"A Hydromechanized Method for Building Approaches
to the Darnitskiy Bridge," Ye. N. Radzevich, N. P.
Kostenko, Engineers, 3 pp

"Mekh Trud i Tyazh Rabot" No 5

Describes use of suction dredge for building en-
bankment, with two drawings, and seven photo-
graphs.

30/49167

FDB

RADZEVICH, YE.N.

PATON, Ye.O., akademik [deceased]; LEBED', D.P., inzhener; RADZEVICH, Ye.N., inzhener; SHUMITSKIY, O.I., inzhener; SHAPRAN, I.S., inzhener; PATON, B.Ye. otvetstvennyy redaktor; SAMOKHEVALOV, Ya.A., redaktor; SIVACHENKO, Ye.K., tekhredaktor

[Use of automatic welding in the construction of a large all-welded city bridge] Primenenie avtomaticheskoi svarki pri stroitel'stve bol'shogo gorodskogo tsel'nosvarnogo mosta. Kiev, Izd-vo Akademii nauk Ukrainskoi SSR, 1954. 1954. 56 p. [Microfilm] (MLRA 7:10)

1. Chlen-korrespondent AN USSR (for Paton, B.Ye.)
(Bridges, Iron and steel) (Welding)

RADZEVICH, Ye.N., inzh.; SPITKOVSKIY, S.A., inzh.

Erecting a precast reinforced concrete span instead of a metal
bridge. Transp. stroi. ll no.1:13-15 Ja '61. (MIRA 14:1)
(Railroad bridges)

BARSHAKOVA, L. I., born ALBANO, 1904, female, POLISH, UZBEK, 1940, 1941, 1942, 1943, 1944, 1945, 1946, 1947, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2

Planning and financing the construction of a bridge by a local anti-trust work organization. Transp. Econ. 15 no. 14-15 (1984, 1985)

1. Mostovoy Nikol' (for Polynayev). 2. Shchennikov, Eduardovskiy
Institut stroitel'stva prikladnykh nauchnykh issledovaniy (Khrushchev, for Vaynskiy).
3. Mostovoy Nikol' (for Mostovoy Nikol' (for Epifanovskiy)).

JASINSKAITE, J.; KERVYTE, A.; MATKUTE, I.; MOLDERYTE, B.; HARVYDAITE, O.;
PAZUSYTE, A.; PUODYTE, M.; RADZEVICIUTE, D.; REKSNYTE, B.; SEPETYTE, O.;
TREBUTYTE, M.; VALAKEVICIUTE, I.; ZINKEVICIUTE, Z.

The incidence and piperazine therapy of ascariasis among students
of the Vilnius Republican School of Medicine. Sveik. apsaug. no.12:
41-43 '62.

1. Respublikines Vilniaus medicinos mokyklos mikrobiologijos burelis.
Mokyklos direktorius -- R. Markauskas; burelio vadovas -- J. Rubikas).
(PIPERAZINE) (ASCARIASIS)

S/137/62/000/004/181/201
A154/A101

AUTHORS: Glizburg, I.L., Kitaygorodskiy, Yu.I., Krasnov, I.I.,
Radzeyevskaya, Ye.V., Sysolin, G.V.

TITLE: Ultrasonic welders

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962. 71, abstract
4E398 (Sb. "Primeneniye ul'trazvuka v tekhnol. mashinostr."
no. 2, M., 1960, 162 - 170)

TEXT: A detailed examination was made of the design of the following
ultrasonic welders: the V30A-1 (UZSM-1) for spot-welding sheet metal; the
V30A-3 (UZSA-3) for welding sheet parts in structures with large planes or
profiled surfaces; the V30A-4 (UZSA-4) for spot-welding sheet parts in large
items; the V30A-2 (UZSM-2) for seam-welding sheet metal. The technical charac-
teristics of each welder are given.

V. Tarisova

[Abstracter's note: Complete translation]

Card 1/1

FUROV, Vasiliiy Grigor'yevich; ALEKSANDROVA, P.A., prof., nauchnyy red.;
RADZHABLI, D.S., red.; NAUMOV, K.M., tekhn.red.

[Attempts of the CPSU to raise the economic and cultural standards
of collective farmers, 1953-1959; based on material of the Altai
Territory and Novosibirsk and Omsk Provinces] Zabota KPSS o povy-
shenii blagosostoiianiia i kul'turnogo urovnia kol'khoznoho krest'ianstva,
1953-1959 gg.; na materialakh Altaiskogo kraia, Novosibirskoi i Omskoi
oblastei. Moskva, Izd-vo VPSH i AON pri TsK KPSS, 1960. 173 p.
(MIRA 13:12)

(Russia--Economic conditions)

MOROZOV, B.M., dots., glav. red.; ALEKSANDROV, P.A., prof., red.; RYAB-
TSEV, I.G., dots., red.; RADZHABLI, D.S., red.; NAUMOV, K.M., tekhn.
red.

[CPSU, the organizer of the struggle for the rapid expansion of agri-
culture] KPSS - organizator bor'by za krutoi pod'em sel'skogo kho-
ziaistva. Moskva, Izd-vo VPSH i AON pri TsK KPSS, 1960. 359 p.
(MIRA 14:12)

1. Moscow. Akademiya obshchestvennykh nauk.
(Agriculture)

1. Reaction of isopropyl alcohol and formic acid on germanium.

Reaction of isopropyl alcohol and formic acid on germanium.
Reaction of isopropyl alcohol and formic acid on germanium.
Reaction of isopropyl alcohol and formic acid on germanium.

(MIRA 18:10)

Reaction of isopropyl alcohol and formic acid on germanium.
Reaction of isopropyl alcohol and formic acid on germanium.

FRIDMAN, V.M.; PALCHADIN, S.K.; GOLITSKII, S.S.

Catalytic properties of silicon. Isomerization of formic acid.
Akad. Nauk. SSSR. 1974. No. 1. P. 165.

1. Institut khimicheskoy fiziki AN SSSR.

RADZHABLI, F.M.

Studying the thermoelectromotive force in natural sulfides of
molybdenum and lead. Uch. zap. AGU no.3:21-23 '57. (MIRA 11:1)
(Molybdenum sulfides) (Lead sulfide) (Thermo-Electricity)

THOMAS, R. A.

92 7/2-ethyl - ethyl-ethyl-carbons
-alkylation

100 12

"Catalytic Transformation of Ethyl-Substituted Five- and Six-Membered Hydrocarbons,"
S. I. Khromov, O. S. Novikov, N. N. Nauchalli, and Leon M. D. Melinsky, Inst. of
Chemical Technology, Moscow

"Dokl. Akad. Nauk SSSR," No. 1, 1963, 10.

A study was made of the stability of the C - C bond in the ethyl group of ethyl-
substituted cyclopentane, cyclohexane, and benzene. It was found by means of
catalytic transformation over a special Ni catalyst that ethyl cyclohexane
dealkylates more easily than ethyl benzene, which dealkylates more easily than ethyl
cyclopentane.

PA 13:12

RADZ'ABLI, S.I.

New variant of an accelerated method for examining the
chromosomes of the mulberry tree. TSitologiya no.1:
108-109 Ja-F'63. (MIRA 16:6)

1. Institut genetiki i selektsii AN AzSSR.
(CHROMOSOMES) (MULBERRY)

ABDULLAYEV, I.K.; RADZHABLI, Ye.P.

Mulberry breeding in the Kuba-Khachmas Zone. Trudy Inst. gen. i
sel. AN Azerb. SSR 1:31-44 '59. (MIRA 13:3)
(Kuba region (Azerbaijan)--Mulberry breeding)
(Khachmas region--Mulberry breeding)

RADZHABLI, Ye.P.

Experimental polyploidy in the mulberry (*Morus L.*). Trudy MOIP.
Otd.biol. 5:360-373 '62. (MIRA 16:5)

1. Institut genetiki i selektsii Azerbydzhanskoy SSR, Baku.
(MULBERRY BREEDING) (POLYPLOIDY) (COLCHICINE)

KHROMOV, S.I.; RADZHABLI-SEIDOVA, N.A.; TRESHCHOVA, Ye.G.; KAZANSKIY, B.A.

Contact conversions of 1-methyl-1-phenylcyclohexane and phenylcyclohexane in the presence of aluminosilicate catalysts. Vest. Mosk. un. Ser. mat., mekh., astron., fiz. khim., 12 no.5:171-176 '57. (MIRA 11:9)

1.Kafedra khimii nefti Moskovskogo gosudarstvennogo universiteta.
(Cyclohexane) (Catalysts)

5(3)

SCV/156-59-1-57/54

AUTHORS: Khromov, S. I., Radzhabli-Seidova, N. A., Kazanskiy, D. A.

TITLE: The Contact Conversions of hem-Dialkyl-cyclohexane Hydrocarbons on an Alumosilicate Catalyst (Kontaktnyye prevrashcheniya gem-dialkiltsiklogeksanovykh uglevodorodov na alyumosilikatnom katalisatore)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 1, pp 143 - 146 (USSR)

ABSTRACT: An investigation made into the catalytic cracking of 1,1-dimethyl-cyclohexane, 1-methyl-1-ethyl-cyclohexane, 1-methyl-1-propyl-cyclohexane, and 1-methyl-1-butyl-cyclohexane, on an alumosilicate catalyst at 500°. In preliminary experiments this temperature had been found to be the optimum. The separation from the quaternary carbon atom of one or both alkyl groups occurred on the partial isomerization of the ring and hydration by means of hydrogen re-arrangement. Besides, a dehydration of the hexacyclic hydrocarbons into benzene and toluene takes place. The alkyl benzenes are probably formed in two ways: alkylation by cracking products of the benzene ring, and alkylation of the hexacyclic naphthenes with the

Card 1/3

The Contact Conversions of Non-Dialkyl-cyclohexane
Hydrocarbons on an Aluminosilicate Catalyst

SSR, 156-1-1-17/54

formation of mainly dimethyl and trimethyl-cyclohexane on a subsequent dehydration into the corresponding aromatic hydrocarbons. The resulting gaseous hydrocarbons and liquid paraffins are cracking products. The main products of contact conversion among the hydrocarbons investigated were aromatic hydrocarbons; m-xylol and p-xylol are formed independently of the initial product in a ratio of 2:1. The ratio of liquid paraffins to naphthenes was approximately 1:3.5. Subsequently, data on the synthesis as well as the physical data (boiling points, refractive indices, etc) of the synthesized initial products are given (Table 1). In table 2 the conversion products established and their percentage share in the converted part of the initial substance are listed. With a rising number of carbon atoms in the alkyl group also the part of the initial substance that enters into the reaction rises. (In 1,1-dimethyl-cyclohexane 42.4% participated in the reaction, as against 84.3% in the case of 1-methyl-1-butyl-cyclohexane). There are 2 tables and 9 references, 6 of which are Soviet.

Card 2/3

The Contact Conversions of hem-Dialkyl-cyclohexane
Hydrocarbons on an Aluminosilicate Catalyst

SOV/116-11-1-37/54

ASSOCIATION: Kafedra nefiti Moskovskogo gosudarstvennogo universiteta
im. M. V. Lomonosova (Chair of Petroleum of Moscow State
University named M. V. Lomonosov)

SUBMITTED: July 30, 1958

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S/081/60/000/022/002/016
A005/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 22, pp. 174-175,
88528

AUTHORS: Kazanskiy, B. A., Khromov, S. I., Radzhabli-Seidova, N. A., Balenkova,
Ye. S.

TITLE: The Formation of Aromatic Hydrocarbons at Contact-Catalytical Trans-
formation of Heme-Dialkyl Cyclohexanes Over an Aluminum Silicate
Catalyst

PERIODICAL: Azerb. khim. zh., 1959, No. 5, pp. 3-12 (Azerbaijdzhan summary)

TEXT: The transformations were studied of 1-methyl-1-alkyl-cyclohexanes:
1,1-dimethyl-cyclohexane, 1-methyl-1-ethyl-cyclohexane, 1-methyl-1-propyl-cyclo-
hexane, and 1-methyl-1-butyl-cyclohexane in a stream system over a synthetic
aluminum-silicate catalyst at 500°C and 0.23 hr⁻¹ volume velocity. Hereat the
following reactions proceed: detachment and rupture of the side chains, methyla-
tion in the nucleus, isomerization of the six-membered cycle to the five-membered
one, and hydrogen disproportionation. Aromatic hydrocarbons are the main trans-
formation products (output about 33-45 percentage by weight with respect to the

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S/081/60/000/022/002/016
A005/AC01

The Formation of Aromatic Hydrocarbons at Contact-Catalytical Transformation of Heme-Dialkyl Cyclohexanes Over an Aluminum Silicate Catalyst

transformed 1-methyl-1-alkyl-cyclohexane): mixtures of the isomeric xylois and trimethylbenzenes, toluene, and a small quantity of benzene; in the xylois mixture the isomers content decreases in the sequence meta > para > ortho-isomers, whereat the content of the meta-isomer is approximately twice as high as that of the para-isomer for all 1-methyl-1-alkyl-cyclohexanes. The absence among the transformation products of 1-methyl-1-propyl-cyclohexane, 1-methyl-1-butyl cyclohexane, propyl- and respectively butyl-benzene points out that the alkyl group with larger chain length detaches easier. Moreover, alkanes are formed (in the main gaseous alkanes, predominantly C₃H₈ and C₄H₁₀), six-membered naphthenes (cyclohexane, methyl-cyclohexane) and five-membered naphthenes [cyclopentane, methyl-cyclopentane, 1,2-dimethyl-cyclopentane]. With increasing side-chain length of 1-methyl-1-alkyl-cyclohexane, the degree of transformation increases from 42% for 1,1-dimethyl-cyclohexane up to 84% for 1-methyl-1-butyl-cyclohexane. The transformation of 1-methyl-1-phenyl-cyclohexane over the same catalyst proceeds easier than that of 1-methyl-1-alkyl-cyclohexane, and 85% of 1-methyl-1-phenyl-cyclohexane undergoes already at 350°C the transformation without formation of gaseous products. Among

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A005/A001

The Formation of Aromatic Hydrocarbons at Contact-Catalytical Transformations of Heme-Dialkyl Cyclohexanes Over an Aluminum Silicate Catalyst

the transformation products, aromatic hydrocarbons are predominant (46.5% benzene, 5% toluene) and naphthenes (about 40%); a mixture of the isomeric dimethyl-cyclopentane, ethyl-cyclopentane, and methyl-cyclohexane. Under the same conditions, the transformation degree of phenyl-cyclohexane amounts to 57%, and the transformation products are benzene (48.9%) and methyl-cyclopentane (48.9%). Assumptions are expressed on the possible ways of naphthene formation. 1,1-dimethyl-cyclohexane was obtained by the described method (Zelinskiy, N. D., Yelagina, N. V., Dokl. AN SSSR, 1950, Vol. 73, No. 3, p. 705), modified according to Khuan-Minlon, which led to increasing output of 1,1-dimethyl-cyclohexane from 58 to 78% with respect to ketone. 1-methyl-1-ethyl-cyclohexane was obtained with 38% output by the action of 1-chloro-1-methyl-cyclohexane on $(C_2H_5)_2Zn$ in tetralin. The synthesis of 1-methyl-1-propyl-cyclohexane and 1-methyl-1-butyl-cyclohexane was performed by interaction of 1-chloro-1-methyl-cyclohexane with the corresponding $RMgBr$ (R is alkyl) with 6-12% output. 1-methyl-1-phenyl-cyclohexane was obtained with 53% output from 1-methyl-cyclohexanol-1 and benzene in the presence of $AlCl_3$.
A. Belotsvetov

Translator's note: This is the full translation of the original Russian abstract.

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5(3)

SOV/79-29-7-24/83

AUTHORS:

Radzhabli-Seidova, N. A., Khromov, S. I., Gitina, R. M.,
Balenkova, Ye. S., Treshchova, Ye. G., Kazanskiy, B. A.

TITLE:

Contact Transformations of 1,1-Dimethyl Cyclohexane and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate Catalyst (Kontaknyye prevrashcheniya 1,1-dimetiltsiklogeksana i 1-metil-1-etil-tsiklogeksana v prisutstvii alyumosilikatnogo katalizatora)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2212-2218 (USSR)

ABSTRACT:

The numerous Russian petroleum types contain among other cycloparaffin hydrocarbons 1,1-dimethyl cyclohexane and 1,1,3-trimethyl cyclohexane (Ref 1). According to reference 2 also the transformations of 1,1-dimethyl cyclohexane at 540° over an aluminosilicate catalyst are described. For the authors it was of interest to investigate the behavior of the most simple mixed methyl alkyl cyclohexanes in the catalytic cracking process over an aluminosilicate catalyst. For this purpose the behavior of 1,1-dimethyl cyclohexane and 1-methyl-1-ethyl cyclohexane over the above catalyst were investigated at 500°. In this connection gaseous products, a liquid condensate, and coke which separated on the catalyst were

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Contact Transformations of 1,1-Dimethyl Cyclohexane SOV/79-22-7-24/83
and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate
Catalyst

obtained. The gaseous products were first fractionated at low temperatures and then determined. The liquid condensate was subjected to an accurate rectification, chromatographic adsorption on silica gel as well as to optical and chemical investigations. The following per cent composition of the reaction products of 1,1-dimethyl cyclohexane were found: hydrocarbon 21.4%, liquid paraffin hydrocarbons 2.6%, naphthene hydrocarbons 8.4, aromatic hydrocarbons 45.2%, coke 22.4%. For 1-methyl-1-ethyl cyclohexane (in wt%): 10.8% gaseous hydrocarbons, 23.0% mixture of paraffin naphthene hydrocarbons, 40.5% aromatic hydrocarbons, 25.7% coke. Under the chosen conditions of catalysis the separation of the alkyl groups which are in the quaternary cyclic carbon atom, hydrocracking process, methylation, aromatization as well as the isomerization of the six-membered cycles into five-membered ones take place. The main products are aromatic hydrocarbons and in small quantities paraffin and

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Contact Transformations of 1,1-Dimethyl Cyclohexane SOV/79-29-7-24/83
and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate
Catalyst

naphthene-hydrocarbons. The direction of the contact transformations of the mixed dialkyl cyclohexanes are illustrated by the scheme in the experimental part. There are 6 tables and 11 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 3, 1958

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5(3)

SOV/79-29-7-25/83

AUTHORS:

Radzhabli-Seidova, N. A., Khromov, S. I., Dorzhin, Ch.,
Balenkova, Ye. S., Treshchova, Ye. G., Kazanskiy, B. A.

TITLE:

Contact Transformations of 1-Methyl-1-propylcyclohexane and
1-Methyl-1-butylcyclohexane on an Aluminum Silicate Catalyst
(Kontaknyye prevrashcheniya 1-metil-1-propiltsiklogeksana i
1-metil-1-butiltsiklogeksana na alyumosil'atnom katalizatore)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2219-2224 (USSR)

ABSTRACT:

The authors continued their investigations (Ref 1) and
synthesized 1-methyl-1-propylcyclohexane and 1-methyl-1-butyl-
cyclohexane over an aluminum silicate catalyst at 500°C; under
the earlier conditions also in this case gaseous hydrocarbons,
a liquid condensate, and coke separated on the catalyst were
obtained. The gaseous products were fractionated at low
temperature by means of the apparatus TsiATIK-51-U and the
composition of the separated fractions was determined by means
of the apparatus VTI. In order to determine the composition
of the condensate, rectification, chromatographic adsorption on
silica gel as well as optical and chemical methods were applied
of investigation. The following wt% were obtained for the

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Contact Transformations of 1-Methyl-1-propylcyclohexane SOV/79-29-7-25/83
and 1-Methyl-1-butylcyclohexane on an Aluminum Silicate Catalyst

transformation products of 1-methyl-1-propyl cyclohexane:
gaseous hydrocarbons 23.8%, liquid paraffins 5.9%,
naphthenes 20.5%, aromatic hydrocarbons 33.3%, coke 16.5% .
The following resulted from 1-methyl-1-butylcyclohexane:
gaseous hydrocarbons 30.6%, liquid paraffins 4.8%, naphthenes
17.0%, aromatic hydrocarbons 41.8%, coke 5.8%. The results
obtained confirm the rules set up already earlier (Ref 1) for
the catalytic transformation of 1,1-dimethyl cyclohexane and
1-methyl-1-ethyl cyclohexane. Also in this case the main
products were aromatic hydrocarbons. In the gaseous products
saturated hydrocarbons predominate (propane and butane). With
increasing number of the carbon atoms in the alkyl group of the
above compounds also the intensity of catalytic transformation
increases. There are 6 tables and 6 references, 4 of which are
Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 9, 1958

Card 2/2

L 26377-66

ACC NR: AP6007660

(A)

SOURCE CODE: UR/0413/66/000/003/0028/0028

AUTHORS: Barenboym, I. Yu.; Dubrova, Ye. P.; Vasil'yev, V. D.; Lurik, N. M.; Radzevich, Ye. N.; Spitkovskiy, S. A.; Fuks, G. B.; Fel'dman, M. B.; Leybman, Ya. M.; Kolomoyshev, B. B.; Flaks, V. A.; Khandzhi, V. V.; Gol'dfel'd, L. M.; Lifshits, I. L.

ORG: none

TITLE: A means of erecting railroad bridges of arched-span construction from separate sections. Class 19, No. 178393

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 28

TOPIC TAGS: bridge, bridge construction, structural engineering, railroad bridge, cantilever bridge

ABSTRACT: This Author Certificate presents a means for erecting railroad bridges of arched span construction from separate sections. The sections are suspended and joined with struts of the structure above the arch by temporary sloping and horizontal members. These members serve as cross-stays and upper booms. The sections also feature a cantilever truss (see Fig. 1) with a triangular framing, the lower girder of which forms a semi-arch. The upper girder of the cantilever truss is set above the travel span, which includes separate elements of the truss used in mounting and elevating the structure. These members subsequently form a triangular cantilever

UDC: 624.624

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L 26377-66

ACC NR: AP6007660

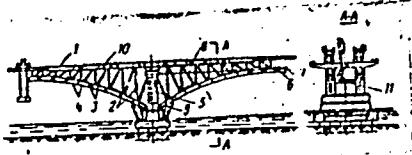


Fig. 1. 1 - upper string of the cantilever truss; 2 - struts; 3 - slanting members; 4 - lower string panels; 5 - anchor post; 6 - key block; 7 - floor plates; 8 - cables; 9 - anchor block; 10 - tension cables; 11 - joints.

frame, cross-stays and semi-arch sections. Each panel thus formed serves as a support for the next panel. The panels are rigidly fastened along the entire face, the process being repeated until the entire semi-arch is formed. Then cables are placed between the link sections and the support. When the cables are tightened, the semi-arches are rotated with respect to the support section, thus unloading the diagonal and horizontal members of the cantilever. The cables are removed, after which the travel-span plates are placed upon the structure above the arch between the link sections of the semi-arch and the support. When the wearing surface is completely laid, the remaining part of the cables is tightened. Favorable working conditions for the support are created by freeing the support from one-sided loadings; assembly of the semi-arch takes place simultaneously on both sides of the pier, with each addition being a cantilever addition. The abutment portion of the semi-arch is prepared in place between the first support block of the semi-arch and the pier. Forces in members of the cantilever are lessened by the introduction of stiffener-cables in the upper girder at $1/2$ -- $2/3$ of its design length. Moments in panels on the semi-arch are reduced through a skewed arrangement of axes of diagonals relative to points of intersection of the axes of vertical members and the semi-arch blocks. Joints are placed between adjacent semi-arches on the assembled panels, thus controlling the position of cantilever frames in the span. Orig. art. has: 1 figure.

Card 2 SUB CODE: 13/ SUBM DATE: 14Nov64

RADZHABOV, F.Sh.

Role of volatile components in assimilation processes. Zap.Uz.
otd.Vses.min.ob-va no.6:57-60 '54. (MLRA 9:12)

1. Kafedra petrologii i metallogenii Sredneaziatskogo politek-
nicheskogo instituta.
(Magma)

RADZHABOV, I.S.
ABDULLAYEV, Kh.M., akademik; ADELUNG, A.S.; VORONICH, V.A.; GOR'KOVY, O.P.;
KALABINA, M.G.; MALAKHOV, A.A.; MATSOKINA, T.M.; MIRKHODZHAYEV, I.M.;
RADZHABOV, P.Sh.; TUMASHEVSKAYA, E.S., red.izd-va; GOR'KOVAYA, Z.P.,
tekhn.red.

[Principal features of magmatism and metallogeny in the Chatkal-Kurama mountain ranges] Osnovnye cherty magmatizma i metallogenii Chatkalo-Kuraminskikh gor. Pod obshchei red. Kh.M.Abdullaeva. Tashkent, Izd-vo Akad.nauk Uzbekskoi SSR, 1958. 288 p. (MIRA 11:7)

1. Akademiya nauk Uzbekskoy SSR (for Abdullayev)
(Chatkal Mountain Range--Mineralogy)
(Kurama Mountain Range--Mineralogy)

MIRKHODZHAYEV, I.M.; RADZHABOV, F.Sh.

Petrochemistry of volcanic and intrusive rocks of the upper
Paleozoic in the Kuruma Subzone. Uzb.geol.zhur. no.4:3-15
'61. (MIRA 14:9)

1. Stredneaziatskiy politekhnicheskiy institut.
(Kurama Range--Rocks, Igneous--Analysis)

RADZHABOV, F.Sh.

Synchronism of the intrusive and effusive activity and
geological significance of volcanic series. Zap. Uz. otd.
Vses. min. ob-va no.14:103-114 '62. (MIRA 16:7)

(Kurama Range---Rocks, Igneous)
(Chatkal Range---Rocks, Igneous)

RADZHABOV, F.Sh.; MIRKHODZHAYEV, I.M.

Water content and other volatile components of natural
melts and their importance in igneous processes. Uzb. geol.
zhur. 7 no.3:19-25 '63. (MIRA 16:11)

1. Tashkentskiy politekhnicheskii institut.

KHAMRABAYEV, I.Kh., doktor geol.-miner. nauk; RADZHABOV, F.Sh.;
GOR'KOVY, O.P.; SALOV, P.I.; KOZYREV, V.V.; PETROV, V.M.;
USMANOV, F.A.; ISAMUKHAMEDOV, I.M., doktor geol.-min. nauk;
KUSTARNIKOVA, A.A.; BORISOV, O.M.; RAKHMATULLAYEV, Kh.R.;
MUSAYEV, A.M.; SVIRIDENKO, A.F.; SULTAN-UIZ-DAG; GOLOVIN,
Ye.M., kand. geol.-miner. nauk; VIS'NEVSKIY, Ya.S., kand.
geol.-miner. nauk, red.; NURATDINOVA, M.R., red.; ASTAKHOV,
A.N., red.

[Petrography of Uzbekistan] Petrografiia Uzbekistana.
Tashkent, Izd-vo "Nauka" UzSSR. Book 1. 1964. 445 p.
(MIRA 18:1)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut geologii
i geofiziki.

ARIPOV, A.A.; AKHMEDZHANOV, M.A.; BGRISOV, O.M.; KURBANİYAZOV, K.;
HATZHABOV, F.Sh.

Oil and gas potentials of Paleozoic sediments in Ustyurt and
areas adjacent to it. Uzb. geol. zhur. 8 no.4:30-37 '64.
(MIRA 18:5)

1. Institut geologii i geofiziki imeni Abdullayeva AN UzSSR.

RADZHAPOV, L.

Doc Chem Sci

Dissertation: "Chemical Investigation of Peat Tar." 23/10/50

Inst of Mineral Fuels, Acad Sci USSR

SO Vecheryaya Moskva
Sum 71

RADZHADOV, L. Sh.

Mbr., Lab. Chemistry of Sapropelite, Sector Sapropelites, Inst. Mineral Fuels, Dept. Tech. Sci., Acad. Sci., -c1949-. Mbr., Inst., -1948-. "Constituent Composition of Peat Tar," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 4, 1949. *-; LAMIN, V. A.

RADZHABOV, M.M.

Some problems in interpreting single longitudinal hodographs of
refracted waves. Izv. AN Turk. SSR no.4:3-12 '58. (MIRA 11:10)

1. Institut fiziki i geofiziki AN Turkmenskoy SSR i Trast "Turkmen-
geofizika."
(Hodograph) (Refraction)

SOV/ 49-58-12-9/17

AUTHOR: Radzhabov, M. M.

TITLE: Determination of the Boundary Velocity from Transverse Hodographs of Refracted Waves. I (Opredeleniye granichnykh skorostey po poperechnym godografam prelomlennykh voln. I)

PERIODICAL: Izvestiya akademii nauk SSSR, seriya geofizicheskaya, 1958, Nr 12, pp 1491-1503 (USSR)

ABSTRACT: The present methods of interpretation of the transverse hodographs of refracted waves are based on the assumption that the boundary velocity V_g of the waves propagating down through the refracting layer is constant (Refs.1 and 2). This method is not free from errors, mainly due to the fact that this velocity is not always constant (Refs.3 and 4). Therefore, another method was worked out which is described in this work. It is based on the determination of the boundary velocity V_g by means of either comparison between the theoretical and the observed hodographs or by the transmission of an observed hodograph into a straight line, the inclination of which will indicate the magnitude of V_g (Refs.2-4).

These two methods are amended as follows: two types of hodographs of refracted waves are obtained when two detonations are made at various points of a transverse profile at

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the same direction from the point of observation. Then the hodograph for the waves $t_1(x_1)$ and $t_2(x_2)$ can be described by the Eqs.(1) and (2), where R_1, R_2 - distances from the detonation points, x_1 - coordinate of observation point ω_R - azimuth, φ - angle of refraction, H_{01} : H_{02} - depth of refracting plane, V_1, V_r - normal and refracted velocities (Fig.1, L - distance between detonations). The top, positive sign under the root of the equation signifies the path of downward inclination of the hodograph in distinction from the upwards part denoted by the lower negative sign. If the registered refraction of both waves corresponds to the same boundary, then the time difference $t_1(x_1) - t_2(x_2)$ between 2 observations can be found from Eq.(3). In order to determine the velocity V_g graphically,

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the expression (4) can be introduced and the Eq.(3) written in the form of Eq.(6) with the denotations (7). In the system of coordinates Δt , Δx , the Eq.(6) can be transformed into the linear equation when $\delta = \text{const}$. Then the angle of straight line will determine the value of V_g , from the

Eq.(8). It can be shown that the condition $\delta = \text{const}$ is satisfied when Eq.(9) is considered. Then δ can be calculated from Eq.(10) (Fig.2 for the observation I). The Eq.(6) is true for every value of φ which can be seen from the Eqs.(11-13). Figs.3 and 4 show the diagrams of the other two observations (II and III) where δ is adjusted as shown by Eqs.(14) and (15) respectively. It is possible to determine the velocity V_g from only one hodograph when the

Eq.(16) is considered. Then Eq.(1) can be written as Eq.(17) (18). In the case of very small inclination a simplified formula, (19), can be applied. The difference between the one hodograph and the two hodograph methods is such that in the former case $\delta \neq \text{const}$. Therefore, it can be applied only when $\varphi = 0$, then V_g can be found from Eq.(20). The

Card 3/5 best practical procedure in the determination of V_g is to

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find first the time difference for a given point, then to define the coordinate Δx from the formula (13). The next step is the construction of the hodograph in the scale $\Delta t = \Delta t(\Delta x)$, finally, the determination of the most probable straight line, the inclination of which determines the value of V_g . Experimental results of the determination of V_g are shown in Figs.5 to 11. Fig.5 represents the hodographs from the investigation in the Kizylkumy rayon, for which the calculations for:

$$\Delta t = t_1(x_1) - t_2(x_2) \text{ and}$$

$$\Delta x = \sqrt{R_1^2 + x_1^2} - \sqrt{R_2^2 + x_2^2}$$

are shown graphically in Fig.6. The velocities $V_g = 400$ m/s and $V_g = 3600$ m/s found from the graph agree with those determined by other methods for this region. The other examples show that V_g can be determined also in the case

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SOV/ 49-58-12-9/17

Determination of the Boundary Velocity from Transverse Hodographs of Refracted Waves. I.

where the boundary velocities vary considerably due to the abrupt changes in the earth stratification. This can be done where the differences of velocities are not lower than 200 to 300 m/sec, as shown in Tables 1 and 2, where velocities, as found by various experimental methods, are shown, while Table 3 gives the results calculated according to the method described. Figs.7 and 11 show the hodographs, and Figs.8 to 10 the evaluated curves for the same profile. There are 11 figures, 3 tables and 5 Soviet references.

ASSOCIATION: Trest "Sredazneftegeofizika" (Trust "Sredazneftegeofizika")
SUBMITTED: July 30, 1957.

Card 5/5

RADZIMAROV, M.M., Cand Phys Math Sci — (diss) "Interpretation
of ~~geogr~~ graphs of incomplete systems in the correlation method
of refracted waves." Mos, 1959, 15 pp (Acad Sci USSR. Inst of
Physics of the Earth im O.Yu Schmidt) 125 copies (KL, 34-59, 111)

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S/049/59/000/03/011/019

AUTHOR: Radzhabov, M. M.

TITLE: On the Accuracy of Determination of the Limiting Velocities From a System of Running Transverse Hodographs of Refracted Waves. II

PERIODICAL: Izvestiya Akademii nauk SSSR, [✓]Seriya geofizicheskaya, 1959, Nr 3, pp 450-459 (USSR)

ABSTRACT: The first part of this article was published in this journal Nr 12, 1958, where the method of determination of the limiting velocity V_r was described. In the present paper an analysis is made of the factors affecting the accuracy. The accuracy is found to depend on the dimensions of the base and on the angle (ϕ) of the inclination. If the base is greater than a certain minimum magnitude, then the degree of accuracy is improved. Therefore a base should be chosen so that it is greater than the minimum magnitude

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S/049/59/000/03/011/019

On the Accuracy of Determination of the Limiting Velocities From
a System of Running Transverse Hodographs of Refracted Waves. II

permissible for the greatest values of V_c employed
in the calculations. Fig 1 shows the isolines of
the relative error $\delta V_c/V_c$ as a function of the
length of the base $\Delta(\Delta x)$. Figs 2 to 5 show the
variations of the error in relation to ω_R , L/R_1
and R_2/R_1 (these quantities are defined in Part I).
Fig 6 gives the transverse hodographs of refracted
waves for various values of the angle ω_R , while
Fig 7 shows the curves $\Delta t = \Delta t(\Delta x)$ for the
above hodographs. There are 7 figures, 3 tables
and 4 Soviet references.

ASSOCIATION: Turkmenskiy geofizicheskiy trest "Turkmengeofizika"
(Turkmenian Geophysical Board "Turkmengeofizika")

SUBMITTED: July 30, 1957
Card 2/2

SOV/49-59-7-13/22

AUTHOR: Radzhabov, M. M.

TITLE: On Some Properties of the Transverse Hodographs of Refracted Waves

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 7, pp 1046-1051 (USSR)

ABSTRACT: The experimental hodographs obtained from the seismic observations by a correlation method are discussed. The refracted waves in the case of one inclined discontinuity are considered. The dislocation of the minimum point x_{\min} of the transverse hodograph (defined by Eqs (1) and (2)) in respect to the projected point of the detonation is related to the time rate τ and to the angle of inclination φ of the refracting layer. The minimum of the transverse hodograph is defined by Eq (4) for the conditions $\partial t / \partial x = 0$. As an example, Fig 1 shows a relationship

$$x_{\min}/R = f(\omega_R)$$

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SOV/49-59-7-13/22

On Some Properties of the Transverse Hodographs of Refracted Waves
for $V_1/V_g = 0.5$ (R - distance from the detonation point,
 ω_R - azimuth, V_1, V_g - velocities in the upper and lower
layers, respectively). The analysis of Eq (4) shows that
the relationship x_{\min}/R increases with an increase of φ
and reaches its limiting value when $\omega_R = 0$, or gradually
decreases when $\omega_R \rightarrow 90^\circ$ and becomes zero when $\omega_R = 90^\circ$.
Fig 2 illustrates the value of x_{\min}/R in relation to
 $n = V_1/V_g$ when $\omega_R = 0$. Fig 3 shows the curves of the
theoretical difference hodograph (expressed as Eq (9)) for
 $n = 0.375$, $R = 8$ km. These curves illustrate the order
of disappearance of the minimum in relation to an increase
of the angle φ . The character of the theoretical diff-
erence hodographs in relation to the distance R , when
 $\omega_R = 0$ and $i = \varphi = 22^\circ$, is shown in Fig 4. The relation-
ship of the time rate τ and the angle φ can be deter-
mined from Eq (10). The angle φ can be determined from
Eq (12) if the value of n is not too large ($n \leq 0.8$).

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- On Some Properties of the Transverse Hodographs of Refracted Waves

The error of calculation in this case can be kept within the practical limits but it becomes large if $n > 0.8$.
There are 6 figures and 4 Soviet references.

ASSOCIATION: Turkmenskiy geofizicheskiy trest "Turkmengeofizika"
(Turkumen Geophysical Trust "Turkmengeofizika")

SUBMITTED: September 5, 1957.

Card 3/3

S/165/60/000/004/006/012
A104/A129

Authors: Agranovskiy, L.Ye., Radzhabov, M.M.

TITLE: Prospecting by the correlation method of refracted waves on the southern slope of the Kara-Kum Plateau

PERIODICAL: Akademiya nauk Turkmensoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 4, 1960, 46-52

TEXT: The advantages of the correlation method of refracted waves (KMFV) for the prospecting of the Kara-Kum Plateau are discussed. The latter gained special interest after rich gas wells were struck in the alpine deposits of the central region near Darvaza, Shikh, Serdy, Zaved. The southern slope of the Kara-Kum is covered with a wide stratum of fine to medium-grained micaceous sand, interspersed by clay layers. Ground waters occur in depths of 5 - 50 m. KMFV registered a number of refracted waves corresponding to different strata bedded within Tertiary deposits in carbonaceous Cretaceous rocks and below these. Boundary velocities of the most intensive waves are shown in Table 1. A comparison of stratum velocities to boundary velocities shows that the latter exceed the former by 1.2 - 1.6. This sharp differentiation renders the KMFV method

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S/195/50/000/004/006/012
A104/A138

Prospecting by the correlation method ...

eminently suitable for investigations of structural and regional problems in this area. KMFV investigations comprised longitudinal and transverse profiling and were carried out by 26-channel (C-26-51-D) stations. Maximum frequency response of modified amplifiers was reached at 25 cps. Station CP-48 (3FL48) seismographs with a natural frequency of 25-27 cps acted as receivers of electric oscillations. The distance between profiles varied from 5 to 1.5-2 km. The net of profiles formed close polygons at a maximum perimeter of 40 km. Experimental data proved that the waves corresponding to basic refraction boundaries are distinguished by recording stability, unbroken phase correlation and extensive tracing ranges. The seismic profiles based on hodographs were compiled according to T_0 and time fields laid down by G.P. Gamurtsev (Ref. 1: "Korrelatsionnyy metod prelomlennykh voln" [Correlation method of refracted waves], Akademizdat, 1952). The method was applied to 1-1.5 m deep refracting boundaries; deeper boundaries were shown with the help of time fields and ray diagrams with due consideration to the vertical mean velocity gradient. The relative error $\Delta H/H$ at the determination of the depth of boundary lines due to inaccurate determination of boundary velocity V_r is calculated according to:

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S/165/60/000/004/006/012
A104/A129

p. Prospecting by the correlation method ...

$$\Delta H/H = \frac{V \sqrt{1-n^2}}{\sqrt{1 - \left(\frac{n}{1 + \frac{\Delta V_r}{V_r}} \right)^2}} - 1,$$

$n = \bar{V}/V_r$, $\Delta V_r = V_r - V_{eff}$ (ΔV_r - absolute error in the determination of velocity V_r).
The Izgant Fold revealed refracted strata bedded in Tertiary and upper-Cretaceous deposits; it forms a sub-latitudinal brachyanticline. The structure of Kazy has been prepared for deep drilling. The structural layout was traced along the refracting stratum with $V_r = 5,500 - 5,700$ m/sec and bedded in Cretaceous deposits. Two further not defined structural complexes were revealed north-west of Kazy; their presence appears to confirm the theory of Yu.N. Godin (Ref. 2: "Glubinnoye geologicheskoye stroeniye Turkmenii i yego izucheniye geofizicheskimi metodami" [Plutonic geological formations of Turkmenia and the exploration by geophysical methods], 1959) on the existence of a Tuarkyr - Karatakshinskiy Bank. Described explorations provide the basis for further prospecting of sloping structures by the KMPV method in the region of Southern Kara-Kum. There are 5 figures, 1 table and 5 Soviet-bloc references.

Card 3/4

Prospecting by the correlation method ...

S/165/60/000/004/006/012

A104/A129

ASSOCIATION: Upravleniye geologii i okhrany nedr pri Sovete Ministrov Turkmen-skoy SSR (Administration of Geology and Protection of Mineral Re-sources in the Council of Ministers of the Turkmen-skaya SSR)

SUBMITTED: March 1, 1960

Район работ	Обозна- чение волны	V _r (м/сек.)
а)	б)	в)
Изгонт	t ₂	3200—3400
	t ₃	3900—4000
	t ₄	4500—4600
	t ₅	6400—6500
Казы	t ₁	2600—2700
	t ₂	3200—3300
	t ₃	5500—5700

Table 1: Boundary velocities of refracted waves

- a) Area
- b) Design waves
- c) V_r (m/sec)

Card 4/4

86205

9.9865
3.9300

S/049/60/000/006/005/005/XX
E191/E381

AUTHORS: Radzhabov, M.M. and Agranovskiy, L.Ye.

TITLE: Determination of the Depth and Profile of the
Separation Boundary from the Individual Transverse
Hodographs of Refracted Waves

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya
geofizicheskaya, 1960, No. 6, pp. 854 - 862
+ 2 plates


TEXT: The problem of determining the profile of the refracting
boundary from the individual transverse hodograph is considered
for the case of a single flat inclined separation boundary.
Formulae are given for determining the depths of the
refracting boundary in the immersion zone from the individual
transverse hodographs of refracted waves at each point of the
profile. The errors in the determination of the effective
depths of the refracting boundary in the immersion zone are
considered. The accuracy of the determination of the profile
of the refracting boundary in the immersion zone is formulated.
Examples of experimental data are given. It is shown that
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S/049/60/000/006/005/005/XX
E191/E381

Determination of the Depth and Profile of the Separation
Boundary from the Individual Transverse Hodographs of
Refracted Waves

only in the case of a straight line transverse profile orientated across the direction of the spread of the refracting boundary and on condition that the separation boundary along the perpendicular line is horizontal, does the individual transverse hodograph of the refracted wave at given values of the velocities in the top layer and the refracting layer offer the possibility of determining the depths at each point of the line of observation. Under actual conditions, these requirements are satisfied adequately in the exploration of structural elements of the type of an inclined monocline layer. In all other cases, additional data are required apart from the values of the velocities. When these data are known, the formulae given permit the plot of the boundary of separation, also in the case when the boundary velocity in the refracting layer varies along the



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86205

S/049/60/000/006/005/005/XX
E191/E381

Determination of the Depth and Profile of the Separation
Boundary from the Individual Transverse Hodographs of
Refracted Waves

line of the transverse profile. The conditions for which the
errors in the depth determination do not exceed 5% are given.
If the plot obtained from the transverse hodograph of refracted
waves yields a curvilinear shape, this is due to the nature
of the profile of the refracting boundary in the immersion zone
of seismic beams. Experimental data obtained in this study
are in agreement with the theoretical analysis.
There are 9 figures, 1 table and 14 Soviet references.

ASSOCIATION: Geofizicheskaya ekspeditsiya No. 2
Upravleniya geologii i okhrany nedr pri
Sovete Ministrov Turkmeniskoy SSR
(Geophysical Expedition No. 2, Directorate for
Geology and Conservation of Mineral Resources
of the Council of Ministers of the Turkmenian SSR)

SUBMITTED: September 26, 1959
Card 3/3

RADZHABOV, M.M.

Selection of mean velocities in determining effective depths
by single transverse hodographs of refracted waves. Izv. AN
SSSR, Ser.geofiz. no.6:863-867 Je '60. (MIRA 13:6)
(Seismometry)
(Prospecting--Geophysical methods)

S/169/62/000/007/035/149
D228/D307

AUTHOR: Radzhabov, M. M.

TITLE: Trial application of cross profiling in the correlation refraction method during seismic surveys in Central Asia's western part (Discourse theses)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 23, abstract 7A152 (V sb. Sostoyaniye i perspektivy razvitiya geofiz. metodov poiskov i razvedki polezn. iskopayemykh, M., Gostoptekhizdat, 1961, 321-322)

TEXT: The correlation refraction method is being applied in Central Asia's western part to study the Paleozoic basement surface and the dissection of the sedimentary strata, to map faults and other tectonic disturbances, and also (in recent years) to seek and outline local structural forms. Cross (non-longitudinal) profiling, too, is being widely employed together with longitudinal profiling when solving these problems. An important quality of cross profiling in the correct choice of distances from the deto-

Card 1/2

Trial application of ...

S/169/62/000/007/035/149
D228/D307

nation point is the small extent or absence of zones of refracted wave interferences. The principle of the overtaking travel-time curve was introduced into the cross profiling procedure; this allowed the means of interpreting the data of this method to be developed substantially. Ways of determining the boundary velocities, and of monitoring and identifying the waves corresponding to various horizons, have also been developed, as has a method of quantitatively processing the amplitudes. The accumulated experimental material testifies that the accuracy of the results has been increased, and that the range of solvable problems has been expanded, in consequence of the use of cross hodograph systems. [Abstracter's note: Complete translation.]

Card 2/2

RADZHABOV, M.M.

Investigating amplitude curves of refracted waves in observations on transverse profiles. Izv.AN Turk.SSR.Ser.fiz.-tekhn., khim.i geol.nauk no.1:26-32 '61. (MIRA 14:8)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov Turkmenkoy SSR.

(Seismic prospecting)

RADZHABOV, M.M.

Kinematic criteria for the identification of refracted waves in a region of overlapping transverse hodographs.

Izv. AN SSSR. Ser. geofiz. no.5:718-727 My '64.

(MIRA 17:6)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefi.

ALIYEV, A., RADJABOV, M.M., TERESHKO, D.L.

new geophysical data on the structure of crystalline basement
in the region of the Araks and Kura junction. Izv. AN Azerb.
SSR. Ser. geol.-geog. nauk no.3:12-16 '65. (MIRA 18:9)

L 32825-66 EWT(1) GW

ACC NR: AP6010067 SOURCE CODE: UR/0387/66/000/003/0083/0090

AUTHOR: Radzhabov, M. M.; Babazade, O. B.

ORG: Azerbaydzhan Scientific-Research Institute on Petroleum Extraciton (Azerbaydzhan-skiy nauchno-issledovatel'skiy Institut po dobyche nefli)

TITLE: Reflected-diffracted waves recorded during deep seismic sounding of the Earth's core [Paper presented at a Session of the Council on Seismology, AN SSSR, and the Scientific Council of the Institute of Physics of the Earth, AN SSSR, in Moscow on 9 May 1964]

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 3, 1966, 83-90

TOPIC TAGS: seismic wave, seismology, reflected shock wave, petrology, shock wave diffraction

ABSTRACT: This article presents some of the results of an experimental investigation of diffracted waves from data collected by the Azerbaydzhan Scientific-Research Institute on Petroleum Extraction (Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefli). The data are interesting from the viewpoint of the possibility of employing these waves in combination with other classes of recorded waves in the separation of blocks in the crystalline mass of the Earth and location of zones of deep faults which divide these blocks. Many reflected-diffracted types of diffraction waves were isolated during the analysis of the wave field on the sector of the profile of deep seismic sounding which intersects, in the

Card 1/2

UDC 550.834

L 32825-66

ACC NR: AP6010067

submeridional direction, the zone of the Talysh-Vanda gravity high in the Kura Depression. It is shown on the basis of experimental data that the intensity of these waves is considerably higher than that of the frontal waves recorded in the first entry, and higher than or comparable to the reflected waves recorded in subsequent entries. The existence of a high in the form of an amplitude graph $\Lambda = \Lambda(y)$ is established; it coincides with the region of the low of the hodograph of the diffraction wave. It is shown that the amplitudes of the waves diminish sharply away from the region. Because of this these waves are separated visually only within a single spacing of the seismographs, and it is not possible to track them on the neighboring spacing. It is established that the diffraction point region is situated on the joints of rocks which differ in their petrographic composition. Orig. art. has: 6 figures and 8 formulas. [08]

SUB CODE: 08 / SUBM DATE: 17Nov64 / ORIG REF: 005

Cord

2/2

SECRET, No. 1.

21451

ABDULAYEV, Sh. A.; i. ABDULAYEV, V. I.

...roditsya ... Azerbaydzhanu.

... (... Azerbaydzhan. ... , 1949, No. 1, s. 110 - 14.

... na Azerbaydzhan. Yaz.

... : ... Zhurnal'nykh Statey, No. 29, Moskva, 1949

RADZHABOV, M.N.
ABDULLAYEV, R.N.; RADZHABOV, M.N.

The Dash-Bulag intrusion (Lesser Caucasus). Izv. AN Azerb. SSR
no. 12:67-83 D '57. (MIRA 11:2)
(Shamkhor District--Rocks, Igneous)

RADZHABOV, M.H.

Petrography of vein rocks in the southwestern part of the Kengur-
Alangez intrusive. Trudy Inst. geol. AN Azerb. SSR 19:191-256 '58.
(MIRA 12:10)

(Caucasus--Rocks, Igneous)

ISMAYLOV, K.A.; RADZHABOV, M.N.

Geological conditions of upper Cretaceous lime stones deposits
within the boundaries of Astara anticlinorium (Talysh Mountains)
[in Azerbaijani with summary in Russian]. Dokl. AN Azerb. SSR.
14 no.4:307-312 '58. (MIRA 11:5)

1. Institut geologii im akademika I.M. Gubkina.
(Talysh Mountains--Limestone)

RADZHAF-OV, M.N.; ISMAYLOV, K.A.

Veinstones in the Talysh Mountains. Izv. AN Azerb. SSR. Ser. geol.-
geog. nauk no. 6:69-78 '59. (MIRA 15:4)
(Talysh Mountains—Mineralogy)

RAZHABOV, M.N.; MAGRIBI, A.A.

Petrochemical characteristics of Kashkachay intrusions (Dashkasan District). Dokl. AN Azerb. SSR 21 no.6:41-45 '65.

(MIRA 18:12)

1. Institut geologii AN AzSSR.

RADZHABOV, N.A.

Selecting intermediate speeds for hoisting mechanisms of rigs.
Azerb. neft. khoz. 41 no.9:43-46 S '62. (MIRA 16:6)

(Hoisting machinery)

ALIKHANOV, F.N.; ARUSHANOV, N.A.; AKHUNDOV, V.Yu.; ALIZADE, M.A.; AZIZBEKOV, S.A.; LAGIROV, M.A.; VEZIROV, S.A.; VOLOBUYEV, V.R.; EFRILOV, F.M.; GADZHIYEV, M.M.; GUSEYNOV, D.M.; GUSEYNOV, I.A.; DADASHEV, F.K.; DADASHZADE, M.A.; DALIN, M.A.; ISHENDEROV, M.A.; KAZIYEV, M.A.; FARAYEV, A.I.; KASHKAY, M.S.; KEL'DYSH, E.V.; KERIMOV, A.G.; IEMBERANSKIY, A.D.; MAMEDOV, G.K.; MEKHTIYEV, M.R.; MIRZOYEV, S.A.; NAGIYEV, M.F.; NESRULLAYEV, N.I.; ORUDZHEV, A.I.; RADZHELOV, R.A.; RUDNEV, K.N.; SADYKHOV, R.N.; SEMENOV, N.N.; TOFCHIYEV, A.V.; TOPCHIBASHEV, M.A.; TAIROVA, T.A.; KHALILOV, Z.I.; PFENDIYEV, G.kh.; SHUFYUROVA, Z.Z.

Iusif Geidarovich Mamedaliev; obituary. Dokl. AN Azerb. SSR 17
no.12:1123-1126 '61. (MIRA 15:2)
(Mamedaliev, Iusif Geidarovich, 1905-1961)

RADZHABOV, R.G.

Peculiarities, treatment, and prophylaxis of snake bites. Azerb.
med.zhur. no.12:56-61 D '59. (MIRA 13:4)
(VENOM--PHYSIOLOGICAL EFFECT)

RAIZHAROV, S. ., Sami Kacbei -- (disc) "Agricultural tractatise in the
author-prime. Polkhoz in the Sami sk rajon, for prophylaxis and treatment,"
Baku, 1900, 21 pp (Azerbaijani State Medical Institute in I. Vazirzadey)
(RL, 30-0, 110)

RADZHABOV, R.G.

Agricultural traumatism and its prophylaxis on collective
cotton farms in Barda District, Azerbaijan S.S.R. during
1957-1960. Azerb. med. zhur. no.9:49 S '62 (MIRA 18:1)

BAZHABOV, SYDYK

Bazhabov, Sydyk

"The history of the Soviet school in Uzbekistan (1917-1941)." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of the Theory and History of Pedagogy. Moscow, 1955. (Dissertation for the Degree of Doctor in Pedagogical Science)

So: Knizhnaya letopis', No. 25, 1956

RADZHABOV, S. A.

3-12-5/27

AUTHOR: Radzhabov, S.A., Professor, Doctor of Juridical Sciences
Rector of the Tadzhik State University.

TITLE: October Opened the Way to Knowledge (Oktyabr' otkryl dorogu
k znaniyam)

PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 12, pp 32 - 38 (USSR)

ABSTRACT: The author states that the October Revolution opened the
way to culture and education for the Tadzhik people. Industry
and agriculture developed with enormous rapidity, and a new
socialist culture arose. A wide system of primary and second-
ary schools, technical and higher educational institutions
was organized. In 1956 there were already 2,547 schools of
general education where 320,400 pupils were trained. Large
sums were spent for the development of national education,
they amounted to 568.8 million rubles in 1956.

ASSOCIATION: Tadzhikskiy gosudarstvennyy universitet (Tadzhik State University)

AVAILABLE: Library or Congress

Card 1/1

ACC NR: AP6036039

SOURCE CODE: UR/0057/66/036/011/2069/2074

AUTHOR: Radzhabov, T.D.; Ivanovskiy, G.F.

ORG: none

TITLE: Ion pumping with a continually renewed sorbent surface

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 11, 1966, 2069-2074

TOPIC TAGS: sorption, inert gas, helium, argon, neon, krypton, xenon, ion beam, metal film, titanium, metal vapor deposition

ABSTRACT: The authors have investigated sorption of argon, helium, neon, krypton, and xenon from up to 8 μ A beams of 2-2.5 keV ions on titanium films during deposition of the film at rates from 3 to 50 $\text{\AA}/\text{min}$. The film was deposited from a direct current heated 22 mm diameter ring of 1.5 mm diameter titanium-molybdenum wire mounted 5 cm from the 7.08 cm^2 target. The substrate was outgassed for 10 minutes at 700° C under a vacuum of 10^{-7} torr. The ion beam was turned on after the titanium film had reached a thickness of 0.1-0.2 micron and was left on for 10 minutes in all the experiments. The substrate was not cooled and reached temperatures of 50-60° C during deposition. After the 10 minute sorption period the titanium film target was gradually heated to from 700 to 1000° C during the course of some 15 minutes and the quantity of desorbed gas was measured by recording the changes of pressure in the working volume. From a

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ACC NR: AP6036039

simple calculation it is concluded that the density of sorbed atoms in the growing titanium film is constant above the initial surface and equal to B/v , where B measures the intensity of the ion beam and v is the deposition rate of the film. The proportionality of the density to B/v was confirmed by the initial behavior of the desorption curves. The total quantity of desorbed gas decreased with increase of v ; this is ascribed to failure of the gas atoms sorbed deep in the target to diffuse to the surface during the short (15-20 minute) desorption time. Helium was desorbed at higher temperatures than the other investigated gases, and the gases whose atomic diameters exceed the lattice constant of the titanium target (krypton and xenon) were not desorbed at temperatures above 700°C . Orig. art. has: 4 formulas, 4 figures and 5 tables.

SUB CODE: 20 SUBM DATE: 16Jun65 ORIG.REF: 002 OTH REF: 004

Card 2/2

26334-66 EWT(l)/EWT(m)/EWP(t) IJP(c) AT/JD

ACC NR: AP6012500

SOURCE CODE: UR/0181/66/008/004/1271/1273

AUTHOR: Ivanovskiy, G. F.; Radzhabov, T. D.

ORG: none

TITLE: Variation in the resistance of titanium films during bombardment by argon ions

SOURCE: Fizika tverdogo tela, v.8, no. 4, 1966, 1271-1273

TOPIC TAGS: titanium, metal film, argon, ion bombardment, resistivity

ABSTRACT: The authors study the change in resistance of titanium films due to bombardment with monoenergetic ions of argon with energies from 0.8 to 4 kev at a current of less than 10 μ a. The titanium films were vaporized in a high vacuum on a molybdenum glass substrate and silver contacts were electrolytically applied. The resistivity of the film was measured as a function of thickness. The resistivity decreased with an increase in thickness, asymptotically approaching that of the massive metal at thicknesses greater than 1000 Å. The results show that argon ions are readily absorbed by titanium films at 20°C. The resistance of the films increases after bombardment. The change in resistance depends on the thickness of the film, as well as on the energy and number of bombarding ions. The change in resistivity reaches a maximum at energies of 2-2.5 kev, which corresponds to the level of sorption saturation. A sorption saturation level corresponding to the maximum change in resistance is also

Card 1/2

26384-66

ACC NR: AP6012500

reached when the number of bombarding ions is increased. The interaction between argon atoms and titanium is apparently purely mechanical. Electron interactions between argon and titanium atoms either do not take place or are too weak to be registered. Argon ions which penetrate deep into the film and are distributed with depth according to some penetration probability may be treated as a purely mechanically introduced impurity which reduces the mobility of free electrons and thus increases the electrical resistance of the film. Orig. art. has: 2 figures, 1 table.

SUB CODE: 20/

SUBM DATE: 02Oct65/

ORIG REF: 002/

OTH REF: 005

ard 2/2 NA/

I 45918-66 EWP(1)/EWT(m)/EWP(L)/ETI/EWP(K) LJP(c) JD

ACC NR: AP6028621

SOURCE CODE: UR/0057/66/036/008/1469/1474

AUTHOR: Ivanovskiy, G.F.; Radzhabov, T.D.; Zagorskaya, T.N.

ORG: none

TITLE: Mechanism of the sorption of inert gas ions on titanium

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 8, 1966, 1469-1474

TOPIC TAGS: helium, argon, neon, titanium, polycrystal, single crystal, thin film, sorption, ion, METAL SURFACE

ABSTRACT: In order to elucidate the nature of the two-peak thermal desorption curves associated with the sorption of inert gas ions on pure metallic surfaces, the authors have investigated the sorption from 2 uA beams of 0.8 to 3 keV argon, neon, and helium ions on titanium surfaces. Titanium was selected for the investigation because of its technical importance in connection with high vacuum sorption pumps. Four types of targets were employed: 0.1 μ films deposited at 10 $\text{\AA}/\text{min}$ on copper substrates and having a grain size of 0.01 to 0.02 μm ; a dense sample with a grain size of 0.014 to 0.043 μm ; a coarse-grained polycrystalline material with a grain size of 0.5 to 1.0 μm ; and a single crystal obtained from titanium iodide by zonal melting in vacuum with an electron beam. The adsorbed ions were desorbed by heating the target to 900° C, and the desorbed atoms were detected and measured with a mass spectrometer and ionization gages. Two-peak desorption curves were obtained for all the gases and for all the targets ex-

Card 1/2

Begin

Reel # 456
Radyvanyuk, A.

REDAVANTUR, ..

International Conference on Scintillation Counters for the Re-
cord and Spectral Measurement of Nuclear Radiation. 1968.
energ. no. 4:310-315 0 10% (MTP: 17:10)

L 33184-66 EWT(1) IJP(c) AT

ACC NR: AR6016168

SOURCE CODE: UR/0058/65/000/011/G017/G017

AUTHORS: Baldin, S. A.; Matveyev, V. V.; Radyvanyuk, A. M.; Sokolov, A. D.

7/
B

TITLE: Development of apparatus for the investigation of high-temperature plasma by means of penetrating radiation

SOURCE: Ref. zh. Fizika, Abs. 11G133

REF SOURCE: Tr. Soyuzn. n.-i. in-ta priborostr., vyp. 1, 1964, 182-198

TOPIC TAGS: plasma diagnostics, high temperature plasma, x radiation, neutron radiation, plasma magnetic field, RADIATION COUNTER, RADIATION SPECTROMETER

ABSTRACT: The fundamental problems are considered in connection with the development of electronic-physics apparatus for the diagnostics of high-temperature current plasma by registration and spectrometry of the hard x-ray and neutron radiations. The requirements imposed on the apparatus and also the testing of the apparatus are investigated on the basis of the operating conditions of toroidal installations with strong magnetic field. [Translation of abstract]

SUB CODE: 20

Card 1/1 MC

L 60360-65 ~~ENT(m)/ENT(1)/ENT(b)/ENT(t)~~ IJP(c) JD

ACCESSION NR: AP5018314

UR/0057/65/035/007/1312/1318

AUTHOR: Ivanovskiy, G. F.; Radzhabov, T. D.

TITLE: Adsorption of argon ions by titanium films, 4

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 35, no. 7, 1965, 1312-1318

TOPIC TAGS: adsorption pump, titanium, argon, ion, metal film, adsorption, desorption

ABSTRACT: The authors have investigated the adsorption of argon ions on freshly deposited titanium films, regenerated films, and on films that were continuously deposited during the adsorption. The investigation was undertaken because of the technical interest of such adsorption in connection with gettering type ion pumps. The 15 liter measuring chamber was evacuated to better than 5×10^{-9} mm Hg. The titanium films were deposited at from 10 to 50 A/min on a 3 cm diameter copper base. A beam of up to 10 microamperes of 0.6 to 4.0 keV monoenergetic argon ions was produced by a magnetron type source and directed onto the film. The diameter of the beam at the target was 3 cm. After the adsorption, the titanium film was heated and the desorbed argon was measured. The desorption curves from films that were deposited before they were bombarded showed two maxima, at about 300

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L-60360-65

ACCESSION NR: AP5018311

and 500°C. The films that were bombarded during deposition showed these two maxima and, in addition, a third rise due to evolution of gas beginning at about 700°C and extending to the melting point of the copper base. Considerably more argon was adsorbed when the film was bombarded during deposition than when it was bombarded only afterward. The quantity of argon adsorbed increased with increasing ion energy at low ion energies, and reached a broad maximum at an ion energy of about 2.5 keV. Adsorption coefficients up to 46% were observed. The experimental results were in good agreement with the theory of A.D. LeClaire and A.H. Rowe (Rev. Metall., 52, 94, 1955). The high-vacuum deposited titanium films did not adsorb neutral argon that was admitted to the chamber with the ion source inoperative. Orig. art. has: 1 formula, 7 figures, and 2 tables.

ASSOCIATION: none

SUBMITTED: 17Sep64

ENCL: 00

SUB CODE: IC, CC

NO REF SOV: 002

OTHER: 007

Card ^{KE} 2/2

USSR / Plant Physiology. Photosynthesis.

I

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34225

Author : Radzevenchuk, I. F.

Inst : Leningrad Agricultural Institute

Title : On the Carotene and Xanthophyll Contents in Perennial Rye.
Zap.

Orig Pub : Leningr. s.-kh. in-ta, 1956, vyp. 11, 240-244.

Abstract : Contents of carotene and xanthophyll in a whole plant - according to a modified method of D. I. Sapozhnikov (Experimental Botany, 1951, No 3) - were ascertained. Before taking a test sample, a vegetative cone was prepared and examined under binocular magnifying glass. A choice of test samples was made from September 23 to November 11 and from April 29 to July 11. The content of pigments and relationship of carotene to xanthophyll in Derzhavin's perennial rye was intermittently changing according to the degree of growth. Content of xanthophyll in Derzhavin's

Card 1/2

RAO ZEVENCHUK, I. F.

Use of the Gustavson-Friedel-Crafts reaction for the
quality improvement of lubricating oils. I. F. Radzev-
chuk. Zhur. Prikl. Khim. 29, 1631-703 (1956).
Alkylation of low-grade petroleum-base oils with chlorinated
paraffin wax (I) in the presence of $AlCl_3$ improves the vis-
cosity index of the product. 1 mol. 23% of I yields oils with
a viscosity index of 83-90, while the use of 39% I gives an oil
with viscosity index 104. The yield of high-grade oil ob-
tained in this way is about 85% (based on crude oil), while
 $PhNO_2$ extr. yields only 7-8% of high-grade oil from the
same crude oil. The reaction was carried out at 60-70°
during 2 hrs., with 2% com. $AlCl_3$ as catalyst; the oil layer
was sep'd., washed with hot H_2O , and clarified with activated
clay at 240°.

G. M. Kozlov

gm

RADZEVENCHUK, I. F.

Application of the Gustavson-Friedel-Crafts reaction to the preparation of lubricating oil from extracts. I. F. Radzevenchuk. *Zhur. Priklad. Khim.* 36, 968-71(1957); *Ch. U.A.* 31, 1688. Alkylation of the furfural ext. from low-grade petroleum lubricating oils with chlorinated paraffin (I) in the presence of $AlCl_3$ yielded an oil with a viscosity index (II) of 41.8, if the starting material contained 23% I and with II 101.7 if it contained 37.71% I. A decrease in the amt. of $AlCl_3$ from 3 to 1.5%, for a reaction mixt. with 13% I, resulted in an oil with II 29.58. Similar oils were obtained by alkylation of a steam-distd. fraction of a heavier ext. Alkylation was carried out at 60° for 2 hrs.; the oil layer was clarified with 10% activated gumbrin at 240° . I. Benowitz

imb
anf

RADZEVENCHUK, I.F.

Alkylation over aluminum silicate catalyst which was activated
by gaseous hydrogen chloride. Part 1: Alkylation of benzene by
alkyl chlorides. Zhur. ob.khim. 28 no.9:2423-2426 S '58.
(MIRA 11:11)

1. Leningradskiy sel'skokhozyaystvennyy institut.
(Benzene) (Alkylation) (Catalysts)

5(3)

SOV/80-32-5-49/52

AUTHOR: Radzevichuk, I.F.

TITLE: The Reaction of Alkylation of Autol Distillate by 6-Chlorinated Paraffin in the Presence of Dry Gumbrine and Gaseous Hydrogen Chloride

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 5, pp 1174-1177 (USSR)

ABSTRACT: It is known that lubricants with low-cyclic hydrocarbons and long side chains have a sloping viscosity-temperature curve, i.e. a high viscosity index and a low density [Ref 2]. The content of paraffin chains in aromatic hydrocarbons may be increased by means of their alkylation with chlorinated paraffin. This reaction is catalyzed by the expensive aluminum chloride. In the article dry gumbrine and gaseous hydrogen chloride are used as catalysts. A preliminary thermal treatment of the clay and the action of the hydrogen chloride on the clay suspension in the alkylating reagents is necessary for the success of the reaction.

Card 1/2

SOV/80-32-5-49-52

The Reaction of Alkylation of Autol Distillate by 6-Chlorinated Paraffin in the Presence of Dry Gumbrine Gaseous Hydrogen Chloride

the final product is 91.4, i.e. the same value as with aluminum chloride. There are 3 tables and 9 Soviet references.

SUBMITTED: February 6, 1958

Card 2/2

RADZEVENCHUK, I.F.

Alkylation of benzene by propylene and anylene. Zhur.prikl.khim.
35 no.11:2538-2542 N '62. (MIRA 15:12)
(Benzene) (Alkylation)

L 63276-65 EWA(h)-2/EWA(j)/EAT(m)/EAT(l)/T JAJ/RH/RO

ACCESSION NR: AP5015123

UR/0366/65/001/006/1017/1020
542.953.1 : 547.563

26
25
B

AUTHOR: Radzavonchuk, I. F.

TITLE: Alkylation over an aluminum silicate catalyst activated with gaseous hydrogen chloride

SOURCE: Zhurnal organicheskoy khimii, v. 1, no. 6, 1965, 1017-1020

TOPIC TAGS: alkylation, aluminum silicate catalyst, hydrogen chloride, phenol, propylene amylene, insecticide, fungicide

ABSTRACT: The alkylation of phenol with propylene and amylene in the presence of dry gumbrin activated with gaseous hydrogen chloride was studied in the hope of synthesizing ortho alkyl phenol derivatives, widely used as insecticides, anti-oxidants, and fungicides. Alkylation with propylene yielded o-isopropylphenol (30% yield). Alkylation with amylene yielded several isomers of anylphenol. The yield of any particular isomer depended on the temperature and concentration of reactants. It is concluded that gumbrin activated with gaseous hydrogen chloride belongs to the ortho-directing class of alkylating catalysts. Orig. art. has: 2 graphs.

Card 1/2

L 63276-65

ACCESSION NR: AP5015123

ASSOCIATION: Leningradskiy sel'skokhozyaystvennyy institut (Leningrad Agricultural Institute)

SUBMITTED: 31Jul63

ENCL: 00

SUB CODE: 00

NO REF SOV: 011

OTHER: 009

NC
Card 2/2

FRENKEL', Semen Shmulevich, frezerovshchik; RADZEVICH, Sergey Sergeyevich,
nauchnyy red.; KOPTEVSKIY, D.Ya., red.; ROGACHEV, F.V., red.;
RAKOV, S.I., tekhn. red.

[Handbook for the young milling-machine operator] Spravochnik
molodogo frezerovshchika. Moskva, Vses. uchebno-pedagog. izd-vo
Trudrezervizdat, 1958. 459 p. (MIRA 11:9)
(Milling machines)

PA 30/49107

RADZEVICH, YE. N.

USSR/Engineering
Dredges
Construction Equipment

May 48

"A Hydromechanized Method for Building Approaches
to the Darnitskiy Bridge," Ye. N. Radzevich, N. P.
Kostenko, Engineers, 3 pp

"Mekh Trud i Tyazh Rabot" No 5

Describes use of suction dredge for building en-
bankment, with two drawings, and seven photo-
graphs.

30/49167

FDB

RADZEVICH, YE.N.

PATON, Ye.O., akademik [deceased]; LEBED', D.P., inzhener; RADZEVICH, Ye.N., inzhener; SHUMITSKIY, O.I., inzhener; SHAPRAN, I.S., inzhener; PATON, B.Ye. otvetstvennyy redaktor; SAMOKHEVALOV, Ya.A., redaktor; SIVACHENKO, Ye.K., tekhredaktor

[Use of automatic welding in the construction of a large all-welded city bridge] Primenenie avtomaticheskoi svarki pri stroitel'stve bol'shogo gorodskogo tsel'nosvarnogo mosta. Kiev, Izd-vo Akademii nauk Ukrainskoi SSR, 1954. 1954. 56 p. [Microfilm] (MLRA 7:10)

1. Chlen-korrespondent AN USSR (for Paton, B.Ye.)
(Bridges, Iron and steel) (Welding)

RADZEVICH, Ye.N., inzh.; SPITKOVSKIY, S.A., inzh.

Erecting a precast reinforced concrete span instead of a metal
bridge. Transp. stroi. ll no.1:13-15 Ja '61. (MIRA 14:1)
(Railroad bridges)

JASINSKAITE, J.; KERVYTE, A.; MATKUTE, I.; MOLDERYTE, B.; HARVYDAITE, O.;
PAZUSYTE, A.; PUODYTE, M.; RADZEVICIUTE, D.; REKSNYTE, B.; SEPETYTE, O.;
TREBUTYTE, M.; VALAKEVICIUTE, I.; ZINKEVICIUTE, Z.

The incidence and piperazine therapy of ascariasis among students
of the Vilnius Republican School of Medicine. Sveik. apsaug. no.12:
41-43 '62.

1. Respublikines Vilniaus medicinos mokyklos mikrobiologijos burelis.
Mokyklos direktorius -- R. Markauskas; burelio vadovas -- J. Rubikas).
(PIPERAZINE) (ASCARIASIS)

S/137/62/000/004/181/201
A154/A101

AUTHORS: Glizburg, I.L., Kitaygorodskiy, Yu.I., Krasnov, I.I.,
Radzeyevskaya, Ye.V., Sysolin, G.V.

TITLE: Ultrasonic welders

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962. 71, abstract
4E398 (Sb. "Primeneniye ul'trazvuka v tekhnol. mashinostr."
no. 2, M., 1960, 162 - 170)

TEXT: A detailed examination was made of the design of the following
ultrasonic welders: the UZSM-1 (UZSM-1) for spot-welding sheet metal; the
UZSA-3 (UZSA-3) for welding sheet parts in structures with large planes or
profiled surfaces; the UZSA-4 (UZSA-4) for spot-welding sheet parts in large
items; the UZSM-2 (UZSM-2) for seam-welding sheet metal. The technical charac-
teristics of each welder are given.

V. Tarisova

[Abstracter's note: Complete translation]

Card 1/1

FUROV, Vasiliiy Grigor'yevich; ALEKSANDROVA, P.A., prof., nauchnyy red.;
RADZHABLI, D.S., red.; NAUMOV, K.M., tekhn.red.

[Attempts of the CPSU to raise the economic and cultural standards
of collective farmers, 1953-1959; based on material of the Altai
Territory and Novosibirsk and Omsk Provinces] Zabota KPSS o povy-
shenii blagosostoiianiia i kul'turnogo urovnia kol'khoz'nogo krest'ianstva,
1953-1959 gg.; na materialakh Altaiskogo kraia, Novosibirskoi i Omskoi
oblastei. Moskva, Izd-vo VPSH i AON pri TsK KPSS, 1960. 173 p.
(MIRA 13:12)

(Russia--Economic conditions)

MOROZOV, B.M., dots., glav. red.; ALEKSANDROV, P.A., prof., red.; RYAB-
TSEV, I.G., dots., red.; RADZHABLI, D.S., red.; NAUMOV, K.M., tekhn.
red.

[CPSU, the organizer of the struggle for the rapid expansion of agri-
culture] KPSS - organizator bor'by za krutoi pod'em sel'skogo kho-
ziaistva. Moskva, Izd-vo VPSH i AON pri TsK KPSS, 1960. 359 p.
(MIRA 14:12)

1. Moscow. Akademiya obshchestvennykh nauk.
(Agriculture)

1. Reaction of isopropyl alcohol and formic acid on germanium.

Reaction of isopropyl alcohol and formic acid on germanium.
Reaction of isopropyl alcohol and formic acid on germanium.

(MIRA 18:10)

Reaction of isopropyl alcohol and formic acid on germanium.
Reaction of isopropyl alcohol and formic acid on germanium.

FRIDMAN, V.M.; PALCHADIN, S.K.; GOLITSKII, S.S.

Catalytic properties of silicon. Isomerization of formic acid.
Akad. Nauk. SSSR. 1974. No. 1. 1-3. 1974. 1974.

1. Institut khimicheskoy fiziki AN SSSR.

RADZHABLI, F.M.

Studying the thermoelectromotive force in natural sulfides of
molybdenum and lead. Uch. zap. AGU no.3:21-23 '57. (MIRA 11:1)
(Molybdenum sulfides) (Lead sulfide) (Thermo-Electricity)

Figure 1 is a schematic representation of the experimental design. It shows a sequence of events: a 1000 ms fixation cross, followed by a 1000 ms presentation of a stimulus (a face), and then a 1000 ms presentation of a response (a face). The stimulus and response are shown as faces with different expressions. The sequence is labeled 'Stimulus' and 'Response'.

$\mu_{\text{L}} = 7/2$ units = parallel chain carbons
 100%

100

"Oxidative Transformation of Ethyl-Substituted Five- and Six-Membered Hydrocarbons,"
S. I. Khrebet, G. G. Novikov, N. A. Panchabli, and Leon M. G. Melinsky, Inst. of
Chem., Acad. Sci. USSR

S. I. Khrebet, S. S. Movilov, N. A. Isachukhli, and Leon N. G. Melnichuk, East of
S. Khrebet, S. S. Movilov

"D. L. SELL" 11, 12, 13, 14, 15, 16,

A study was made of the stability of the C - C bond in the ethyl group of ethyl-substituted cyclopentane, cyclohexane, and benzene. It was found by means of catalytic transformation over a special Ni catalyst that ethyl cyclohexane dealkylates more easily than ethyl benzene, which dealkylates more easily than ethyl cyclopentane.

44-38861-111

RADZ'ABLI, S.I.

New variant of an accelerated method for examining the
chromosomes of the mulberry tree. TSitologiya no.1:
108-109 Ja-F'63. (MIRA 16:6)

1. Institut genetiki i selektsii AN AzSSR.
(CHROMOSOMES) (MULBERRY)

ABDULLAYEV, I.K.; RADZHABLI, Ye.P.

Mulberry breeding in the Kuba-Khachmas Zone. Trudy Inst. gen. i
sel. AN Azerb. SSR 1:31-44 '59. (MIRA 13:3)
(Kuba region (Azerbaijan)--Mulberry breeding)
(Khachmas region--Mulberry breeding)

RADZHABLI, Ye.P.

Experimental polyploidy in the mulberry (*Morus L.*). Trudy MOIP.
Otd.biol. 5:360-373 '62. (MIRA 16:5)

1. Institut genetiki i selektsii Azerbydzhanskoy SSR, Baku.
(MULBERRY BREEDING) (POLYPLOIDY) (COLCHICINE)

KHROMOV, S.I.; RADZHABLI-SEIDOVA, N.A.; TRESHCHOVA, Ye.G.; KAZANSKIY, B.A.

Contact conversions of 1-methyl-1-phenylcyclohexane and phenylcyclohexane in the presence of aluminosilicate catalysts. Vest. Mosk. un. Ser. mat., mekh., astron., fiz. khim., 12 no.5:171-176 '57. (MIRA 11:9)

1.Kafedra khimii nefti Moskovskogo gosudarstvennogo universiteta.
(Cyclohexane) (Catalysts)

5(3)

SCV/156-59-1-57/54

AUTHORS: Khromov, S. I., Radzhabli-Seidova, N. A., Kazanskiy, D. A.

TITLE: The Contact Conversions of hem-Dialkyl-cyclohexane Hydrocarbons on an Alumosilicate Catalyst (Kontaktnyye prevrashcheniya gem-dialkiltsiklogeksanovykh uglevodorodov na alyumosilikatnom katalisatore)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Khimiya i khimicheskaya tekhnologiya, 1959, Nr 1, pp 143 - 146 (USSR)

ABSTRACT: An investigation made into the catalytic cracking of 1,1-dimethyl-cyclohexane, 1-methyl-1-ethyl-cyclohexane, 1-methyl-1-propyl-cyclohexane, and 1-methyl-1-butyl-cyclohexane, on an alumosilicate catalyst at 500°. In preliminary experiments this temperature had been found to be the optimum. The separation from the quaternary carbon atom of one or both alkyl groups occurred on the partial isomerization of the ring and hydration by means of hydrogen re-arrangement. Besides, a dehydration of the hexacyclic hydrocarbons into benzene and toluene takes place. The alkyl benzenes are probably formed in two ways: alkylation by cracking products of the benzene ring, and alkylation of the hexacyclic naphthenes with the

Card 1/3

The Contact Conversions of Non-Dialkyl-cyclohexane
Hydrocarbons on an Aluminosilicate Catalyst

SSV, 156-1-1-17/54

formation of mainly dimethyl and trimethyl-cyclohexane on a subsequent dehydration into the corresponding aromatic hydrocarbons. The resulting gaseous hydrocarbons and liquid paraffins are cracking products. The main products of contact conversion among the hydrocarbons investigated were aromatic hydrocarbons; m-xylol and p-xylol are formed independently of the initial product in a ratio of 2:1. The ratio of liquid paraffins to naphthenes was approximately 1:3.5. Subsequently, data on the synthesis as well as the physical data (boiling points, refractive indices, etc) of the synthesized initial products are given (Table 1). In table 2 the conversion products established and their percentage share in the converted part of the initial substance are listed. With a rising number of carbon atoms in the alkyl group also the part of the initial substance that enters into the reaction rises. (In 1,1-dimethyl-cyclohexane 42.4% participated in the reaction, as against 84.3% in the case of 1-methyl-1-butyl-cyclohexane). There are 2 tables and 9 references, 6 of which are Soviet.

Card 2/3

The Contact Conversions of hem-Dialkyl-cyclohexane
Hydrocarbons on an Aluminosilicate Catalyst

SOV/116-11-1-37/54

ASSOCIATION: Kafedra nefiti Moskovskogo gosudarstvennogo universiteta
im. M. V. Lomonosova (Chair of Petroleum of Moscow State
University named M. V. Lomonosov)

SUBMITTED: July 30, 1958

Card 3/5

S/081/60/000/022/002/016
A005/A001

Translation from: Referativnyy zhurnal, Khimiya, 1960, No. 22, pp. 174-175,
88528

AUTHORS: Kazanskiy, B. A., Khromov, S. I., Radzhabli-Seidova, N. A., Balenkova,
Ye. S.

TITLE: The Formation of Aromatic Hydrocarbons at Contact-Catalytical Trans-
formation of Heme-Dialkyl Cyclohexanes Over an Aluminum Silicate
Catalyst

PERIODICAL: Azerb. khim. zh., 1959, No. 5, pp. 3-12 (Azerbaijdzhan summary)

TEXT: The transformations were studied of 1-methyl-1-alkyl-cyclohexanes:
1,1-dimethyl-cyclohexane, 1-methyl-1-ethyl-cyclohexane, 1-methyl-1-propyl-cyclo-
hexane, and 1-methyl-1-butyl-cyclohexane in a stream system over a synthetic
aluminum-silicate catalyst at 500°C and 0.23 hr⁻¹ volume velocity. Hereat the
following reactions proceed: detachment and rupture of the side chains, methyla-
tion in the nucleus, isomerization of the six-membered cycle to the five-membered
one, and hydrogen disproportionation. Aromatic hydrocarbons are the main trans-
formation products (output about 33-45 percentage by weight with respect to the

Card 1/3

S/081/60/000/022/002/016
A005/AC01

The Formation of Aromatic Hydrocarbons at Contact-Catalytical Transformation of Heme-Dialkyl Cyclohexanes Over an Aluminum Silicate Catalyst

transformed 1-methyl-1-alkyl-cyclohexane): mixtures of the isomeric xylois and trimethylbenzenes, toluene, and a small quantity of benzene; in the xylois mixture the isomers content decreases in the sequence meta > para > ortho-isomers, whereat the content of the meta-isomer is approximately twice as high as that of the para-isomer for all 1-methyl-1-alkyl-cyclohexanes. The absence among the transformation products of 1-methyl-1-propyl-cyclohexane, 1-methyl-1-butyl cyclohexane, propyl- and respectively butyl-benzene points out that the alkyl group with larger chain length detaches easier. Moreover, alkanes are formed (in the main gaseous alkanes, predominantly C_3H_8 and C_4H_{10}), six-membered naphthenes (cyclohexane, methyl-cyclohexane) and five-membered naphthenes [cyclopentane, methyl-cyclopentane, 1,2-dimethyl-cyclopentane]. With increasing side-chain length of 1-methyl-1-alkyl-cyclohexane, the degree of transformation increases from 42% for 1,1-dimethyl-cyclohexane up to 84% for 1-methyl-1-butyl-cyclohexane. The transformation of 1-methyl-1-phenyl-cyclohexane over the same catalyst proceeds easier than that of 1-methyl-1-alkyl-cyclohexane, and 85% of 1-methyl-1-phenyl-cyclohexane undergoes already at 350°C the transformation without formation of gaseous products. Among

Card 2/3

S/081/60/000/022/002/016
A005/A001

The Formation of Aromatic Hydrocarbons at Contact-Catalytical Transformations of Heme-Dialkyl Cyclohexanes Over an Aluminum Silicate Catalyst

the transformation products, aromatic hydrocarbons are predominant (46.5% benzene, 5% toluene) and naphthenes (about 40%); a mixture of the isomeric dimethyl-cyclopentane, ethyl-cyclopentane, and methyl-cyclohexane. Under the same conditions, the transformation degree of phenyl-cyclohexane amounts to 57%, and the transformation products are benzene (48.9%) and methyl-cyclopentane (48.9%).

Assumptions are expressed on the possible ways of naphthene formation. 1,1-dimethyl-cyclohexane was obtained by the described method (Zelinskiy, N. D., Yelagina, N. V., Dokl. AN SSSR, 1950, Vol. 73, No. 3, p. 705), modified according to Khuan-Minlon, which led to increasing output of 1,1-dimethyl-cyclohexane from 58 to 78% with respect to ketone. 1-methyl-1-ethyl-cyclohexane was obtained with 38% output by the action of 1-chloro-1-methyl-cyclohexane on $(C_2H_5)_2Zn$ in tetralin. The synthesis of 1-methyl-1-propyl-cyclohexane and 1-methyl-1-butyl-cyclohexane was performed by interaction of 1-chloro-1-methyl-cyclohexane with the corresponding $RMgBr$ (R is alkyl) with 6-12% output. 1-methyl-1-phenyl-cyclohexane was obtained with 53% output from 1-methyl-cyclohexanol-1 and benzene in the presence of $AlCl_3$.
A. Belotsvetov

Translator's note: This is the full translation of the original Russian abstract.

Card 3/3

5(3)

SOV/79-29-7-24/83

AUTHORS:

Radzhabli-Seidova, N. A., Khromov, S. I., Gitina, R. M.,
Balenkova, Ye. S., Treshchova, Ye. G., Kazanskiy, B. A.

TITLE:

Contact Transformations of 1,1-Dimethyl Cyclohexane and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate Catalyst (Kontaknyye prevrashcheniya 1,1-dimetiltsiklogeksana i 1-metil-1-etil-tsiklogeksana v prisutstvii alyumosilikatnogo katalizatora)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2212-2218 (USSR)

ABSTRACT:

The numerous Russian petroleum types contain among other cycloparaffin hydrocarbons 1,1-dimethyl cyclohexane and 1,1,3-trimethyl cyclohexane (Ref 1). According to reference 2 also the transformations of 1,1-dimethyl cyclohexane at 540° over an aluminosilicate catalyst are described. For the authors it was of interest to investigate the behavior of the most simple mixed methyl alkyl cyclohexanes in the catalytic cracking process over an aluminosilicate catalyst. For this purpose the behavior of 1,1-dimethyl cyclohexane and 1-methyl-1-ethyl cyclohexane over the above catalyst were investigated at 500°. In this connection gaseous products, a liquid condensate, and coke which separated on the catalyst were

Card 1/3

Contact Transformations of 1,1-Dimethyl Cyclohexane SOV/79-22-7-24/83
and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate
Catalyst

obtained. The gaseous products were first fractionated at low temperatures and then determined. The liquid condensate was subjected to an accurate rectification, chromatographic adsorption on silica gel as well as to optical and chemical investigations. The following per cent composition of the reaction products of 1,1-dimethyl cyclohexane were found: hydrocarbon 21.4%, liquid paraffin hydrocarbons 2.6%, naphthene hydrocarbons 8.4, aromatic hydrocarbons 45.2%, coke 22.4%. For 1-methyl-1-ethyl cyclohexane (in wt%): 10.8% gaseous hydrocarbons, 23.0% mixture of paraffin naphthene hydrocarbons, 40.5% aromatic hydrocarbons, 25.7% coke. Under the chosen conditions of catalysis the separation of the alkyl groups which are in the quaternary cyclic carbon atom, hydrocracking process, methylation, aromatization as well as the isomerization of the six-membered cycles into five-membered ones take place. The main products are aromatic hydrocarbons and in small quantities paraffin and

Card 2/3

Contact Transformations of 1,1-Dimethyl Cyclohexane SOV/79-29-7-24/83
and 1-Methyl-1-ethyl Cyclohexane in the Presence of an Aluminosilicate
Catalyst

naphthene-hydrocarbons. The direction of the contact transformations of the mixed dialkyl cyclohexanes are illustrated by the scheme in the experimental part. There are 6 tables and 11 references, 6 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 3, 1958

Card 3/3

5(3)

SOV/79-29-7-25/83

AUTHORS:

Radzhabli-Seidova, N. A., Khromov, S. I., Dorzhin, Ch.,
Balenkova, Ye. S., Treshchova, Ye. G., Kazanskiy, B. A.

TITLE:

Contact Transformations of 1-Methyl-1-propylcyclohexane and
1-Methyl-1-butylcyclohexane on an Aluminum Silicate Catalyst
(Kontaknyye prevrashcheniya 1-metil-1-propiltsiklogeksana i
1-metil-1-butiltsiklogeksana na alyumosil'atnom katalizatore)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 7, pp 2219-2224 (USSR)

ABSTRACT:

The authors continued their investigations (Ref 1) and
synthesized 1-methyl-1-propylcyclohexane and 1-methyl-1-butyl-
cyclohexane over an aluminum silicate catalyst at 500°C; under
the earlier conditions also in this case gaseous hydrocarbons,
a liquid condensate, and coke separated on the catalyst were
obtained. The gaseous products were fractionated at low
temperature by means of the apparatus TsiATIK-51-U and the
composition of the separated fractions was determined by means
of the apparatus VTI. In order to determine the composition
of the condensate, rectification, chromatographic adsorption on
silica gel as well as optical and chemical methods were applied
of investigation. The following wt% were obtained for the

Card 1/2

Contact Transformations of 1-Methyl-1-propylcyclohexane SOV/79-29-7-25/83
and 1-Methyl-1-butylcyclohexane on an Aluminum Silicate Catalyst

transformation products of 1-methyl-1-propyl cyclohexane:
gaseous hydrocarbons 23.8%, liquid paraffins 5.9%,
naphthenes 20.5%, aromatic hydrocarbons 33.3%, coke 16.5% .
The following resulted from 1-methyl-1-butylcyclohexane:
gaseous hydrocarbons 30.6%, liquid paraffins 4.8%, naphthenes
17.0%, aromatic hydrocarbons 41.8%, coke 5.8%. The results
obtained confirm the rules set up already earlier (Ref 1) for
the catalytic transformation of 1,1-dimethyl cyclohexane and
1-methyl-1-ethyl cyclohexane. Also in this case the main
products were aromatic hydrocarbons. In the gaseous products
saturated hydrocarbons predominate (propane and butane). With
increasing number of the carbon atoms in the alkyl group of the
above compounds also the intensity of catalytic transformation
increases. There are 6 tables and 6 references, 4 of which are
Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: June 9, 1958

Card 2/2

L 26377-66

ACC NR: AP6007660

(A)

SOURCE CODE: UR/0413/66/000/003/0028/0028

AUTHORS: Barenboym, I. Yu.; Dubrova, Ye. P.; Vasil'yev, V. D.; Lurik, N. M.;
Radzevich, Ye. N.; Spitkovskiy, S. A.; Fuks, G. B.; Fel'dman, M. B.; Leybman,
Ya. M.; Kolomoyshev, B. B.; Flaks, V. A.; Khandzhi, V. V.; Gol'dfel'd, L. M.;
Lifshits, I. L.

ORG: none

TITLE: A means of erecting railroad bridges of arched-span construction from
separate sections. Class 19, No. 178393

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 28

TOPIC TAGS: bridge, bridge construction, structural engineering, railroad bridge,
cantilever bridge

ABSTRACT: This Author Certificate presents a means for erecting railroad bridges of
arched span construction from separate sections. The sections are suspended and
joined with struts of the structure above the arch by temporary sloping and horizontal
members. These members serve as cross-stays and upper booms. The sections also
feature a cantilever truss (see Fig. 1) with a triangular framing, the lower girder
of which forms a semi-arch. The upper girder of the cantilever truss is set above
the travel span, which includes separate elements of the truss used in mounting and
elevating the structure. These members subsequently form a triangular cantilever

UDC: 624.624

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L 26377-66

ACC NR: AP6007660

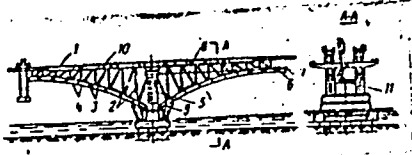


Fig. 1. 1 - upper string of the cantilever truss; 2 - struts; 3 - slanting members; 4 - lower string panels; 5 - anchor post; 6 - key block; 7 - floor plates; 8 - cables; 9 - anchor block; 10 - tension cables; 11 - joints.

frame, cross-stays and semi-arch sections. Each panel thus formed serves as a support for the next panel. The panels are rigidly fastened along the entire face, the process being repeated until the entire semi-arch is formed. Then cables are placed between the link sections and the support. When the cables are tightened, the semi-arches are rotated with respect to the support section, thus unloading the diagonal and horizontal members of the cantilever. The cables are removed, after which the travel-span plates are placed upon the structure above the arch between the link sections of the semi-arch and the support. When the wearing surface is completely laid, the remaining part of the cables is tightened. Favorable working conditions for the support are created by freeing the support from one-sided loadings; assembly of the semi-arch takes place simultaneously on both sides of the pier, with each addition being a cantilever addition. The abutment portion of the semi-arch is prepared in place between the first support block of the semi-arch and the pier. Forces in members of the cantilever are lessened by the introduction of stiffener cables in the upper girder at $1/2$ -- $2/3$ of its design length. Moments in panels on the semi-arch are reduced through a skewed arrangement of axes of diagonals relative to points of intersection of the axes of vertical members and the semi-arch blocks. Joints are placed between adjacent semi-arches on the assembled panels, thus controlling the position of cantilever frames in the span. Orig. art. has: 1 figure.

Card 2 SUB CODE: 13/ SUBM DATE: 14Nov64

RADZHABOV, F.Sh.

Role of volatile components in assimilation processes. Zap.Uz.
otd.Vses.min.ob-va no.6:57-60 '54. (MLRA 9:12)

1. Kafedra petrologii i metallogenii Sredneaziatskogo politek-
nicheskogo instituta.
(Magma)

RADZHABOV, I.S.
ABDULLAYEV, Kh.M., akademik; ADELUNG, A.S.; VORONICH, V.A.; GOR'KOVY, O.P.;
KALABINA, M.G.; MALAKHOV, A.A.; MATSOKINA, T.M.; MIRKHODZHAYEV, I.M.;
RADZHABOV, P.Sh.; TUMASHEVSKAYA, E.S., red.izd-va; GOR'KOVAYA, Z.P.,
tekhn.red.

[Principal features of magmatism and metallogeny in the Chatkal-
Kurama mountain ranges] Osnovnye cherty magmatizma i metallogenii
Chatkalo-Kuraminskikh gor. Pod obshchei red. Kh.M.abdullaeva.
Tashkent, Izd-vo Akad.nauk Uzbekskoi SSR, 1958. 288 p. (MIRA 11:7)

1. Akademiya nauk Uzbekskoy SSR (for Abdullayev)
(Chatkal Mountain Range--Mineralogy)
(Kurama Mountain Range--Mineralogy)

MIRKHODZHAYEV, I.M.; RADZHABOV, F.Sh.

Petrochemistry of volcanic and intrusive rocks of the upper
Paleozoic in the Kuruma Subzone. Uzb.geol.zhur. no.4:3-15
'61. (MIRA 14:9)

1. Stredneaziatskiy politekhnicheskiy institut.
(Kurama Range--Rocks, Igneous--Analysis)

RADZHABOV, F.Sh.

Synchronism of the intrusive and effusive activity and
geological significance of volcanic series. Zap. Uz. otd.
Vses. min. ob-va no.14:103-114 '62. (MIRA 16:7)

(Kurama Range---Rocks, Igneous)
(Chatkal Range---Rocks, Igneous)

RADZHABOV, F.Sh.; MIRKHODZHAYEV, I.M.

Water content and other volatile components of natural
melts and their importance in igneous processes. Uzb. geol.
zhur. 7 no.3:19-25 '63. (MIRA 16:11)

1. Tashkentskiy politekhnicheskii institut.

KHAMRABAYEV, I.Kh., doktor geol.-miner. nauk; RADZHABOV, F.Sh.;
GOR'KOVY, O.P.; SALOV, P.I.; KOZYREV, V.V.; PETROV, V.M.;
USMANOV, F.A.; ISAMUKHAMEDOV, I.M., doktor geol.-min. nauk;
KUSTARNIKOVA, A.A.; BORISOV, O.M.; RAKHMATULLAYEV, Kh.R.;
MUSAYEV, A.M.; SVIRIDENKO, A.F.; SULTAN-UIZ-DAG; GOLOVIN,
Ye.M., kand. geol.-miner. nauk; VIS'NEVSKIY, Ya.S., kand.
geol.-miner. nauk, red.; NURATDINOVA, M.R., red.; ASTAKHOV,
A.N., red.

[Petrography of Uzbekistan] Petrografiia Uzbekistana.
Tashkent, Izd-vo "Nauka" UzSSR. Book 1. 1964. 445 p.
(MIRA 18:1)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. Institut geologii
i geofiziki.

ARIPOV, A.A.; AKHMEDZHANOV, M.A.; BGRISOV, O.M.; KURBANIZAZOV, K.;
HATZABOV, F.Sh.

Oil and gas potentials of Paleozoic sediments in Ustyurt and
areas adjacent to it. Uzb. geol. zhur. 8 no.4:30-37 '64.
(MIRA 18:5)

1. Institut geologii i geofiziki imeni Abdullayeva AN UzSSR.

RADZHAPOV, L.

Doc Chem Sci

Dissertation: "Chemical Investigation of Peat Tar." 23/10/50

Inst of Mineral Fuels, Acad Sci USSR

SO Vecheryaya Moskva
Sum 71

RADZHADOV, L. Sh.

Mbr., Lab. Chemistry of Sapropelite, Sector Sapropelites, Inst. Mineral Fuels, Dept. Tech. Sci., Acad. Sci., -c1949-. Mbr., Inst., -1948-. "Constituent Composition of Peat Tar," Iz. Ak. Nauk SSSR, Otdel. Tekh. Nauk, No. 4, 1949. *-; LAMIN, V. A.

RADZHABOV, M.M.

Some problems in interpreting single longitudinal hodographs of
refracted waves. Izv. AN Turk. SSR no.4:3-12 '58. (MIRA 11:10)

1. Institut fiziki i geofiziki AN Turkmenkoy SSR i Trast "Turkmen-
geofizika."
(Hodograph) (Refraction)

SOV/ 49-58-12-9/17

AUTHOR: Radzhabov, M. M.

TITLE: Determination of the Boundary Velocity from Transverse Hodographs of Refracted Waves. I (Opredeleniye granichnykh skorostey po poperechnym godografam prelomlennykh voln. I)

PERIODICAL: Izvestiya akademii nauk SSSR, seriya geofizicheskaya, 1958, Nr 12, pp 1491-1503 (USSR)

ABSTRACT: The present methods of interpretation of the transverse hodographs of refracted waves are based on the assumption that the boundary velocity V_g of the waves propagating down through the refracting layer is constant (Refs.1 and 2). This method is not free from errors, mainly due to the fact that this velocity is not always constant (Refs.3 and 4). Therefore, another method was worked out which is described in this work. It is based on the determination of the boundary velocity V_g by means of either comparison between the theoretical and the observed hodographs or by the transmission of an observed hodograph into a straight line, the inclination of which will indicate the magnitude of V_g (Refs.2-4).

These two methods are amended as follows: two types of hodographs of refracted waves are obtained when two detonations are made at various points of a transverse profile at

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SOV/ 49-58-12-9/17

Determination of the Boundary Velocity from Transverse Hodographs of Refracted Waves. I.

the same direction from the point of observation. Then the hodograph for the waves $t_1(x_1)$ and $t_2(x_2)$ can be described by the Eqs.(1) and (2), where R_1, R_2 - distances from the detonation points, x_1 - coordinate of observation point ω_R - azimuth, φ - angle of refraction, H_{01} : H_{02} - depth of refracting plane, V_1, V_r - normal and refracted velocities (Fig.1, L - distance between detonations). The top, positive sign under the root of the equation signifies the path of downward inclination of the hodograph in distinction from the upwards part denoted by the lower negative sign. If the registered refraction of both waves corresponds to the same boundary, then the time difference $t_1(x_1) - t_2(x_2)$ between 2 observations can be found from Eq.(3). In order to determine the velocity V_g graphically,

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SOV/ 49-58-12-9/17

Determination of the Boundary Velocity from Transverse Hodographs of Refracted Waves. I.

the expression (4) can be introduced and the Eq.(3) written in the form of Eq.(6) with the denotations (7). In the system of coordinates Δt , Δx , the Eq.(6) can be transformed into the linear equation when $\delta = \text{const}$. Then the angle of straight line will determine the value of V_g , from the

Eq.(8). It can be shown that the condition $\delta = \text{const}$ is satisfied when Eq.(9) is considered. Then δ can be calculated from Eq.(10) (Fig.2 for the observation I). The Eq.(6) is true for every value of φ which can be seen from the Eqs.(11-13). Figs.3 and 4 show the diagrams of the other two observations (II and III) where δ is adjusted as shown by Eqs.(14) and (15) respectively. It is possible to determine the velocity V_g from only one hodograph when the

Eq.(16) is considered. Then Eq.(1) can be written as Eq.(17) (18). In the case of very small inclination a simplified formula, (19), can be applied. The difference between the one hodograph and the two hodograph methods is such that in the former case $\delta \neq \text{const}$. Therefore, it can be applied only when $\varphi = 0$, then V_g can be found from Eq.(20). The

Card 3/5 best practical procedure in the determination of V_g is to

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find first the time difference for a given point, then to define the coordinate Δx from the formula (13). The next step is the construction of the hodograph in the scale $\Delta t = \Delta t(\Delta x)$, finally, the determination of the most probable straight line, the inclination of which determines the value of V_g . Experimental results of the determination of V_g are shown in Figs.5 to 11. Fig.5 represents the hodographs from the investigation in the Kizylkumy rayon, for which the calculations for:

$$\Delta t = t_1(x_1) - t_2(x_2) \text{ and}$$

$$\Delta x = \sqrt{R_1^2 + x_1^2} - \sqrt{R_2^2 + x_2^2}$$

are shown graphically in Fig.6. The velocities $V_g = 400$ m/s and $V_g = 3600$ m/s found from the graph agree with those determined by other methods for this region. The other examples show that V_g can be determined also in the case

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SOV/ 49-58-12-9/17

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where the boundary velocities vary considerably due to the abrupt changes in the earth stratification. This can be done where the differences of velocities are not lower than 200 to 300 m/sec, as shown in Tables 1 and 2, where velocities, as found by various experimental methods, are shown, while Table 3 gives the results calculated according to the method described. Figs.7 and 11 show the hodographs, and Figs.8 to 10 the evaluated curves for the same profile. There are 11 figures, 3 tables and 5 Soviet references.

ASSOCIATION: Trest "Sredazneftegeofizika" (Trust "Sredazneftegeofizika")
SUBMITTED: July 30, 1957.

Card 5/5

RADZIMAROV, M.M., Cand Phys Math Sci — (diss) "Interpretation of ~~geogr~~ graphs of incomplete systems in the correlation method of refracted waves." Mos, 1959, 15 pp (Acad Sci USSR. Inst of Physics of the Earth im O.Yu Schmidt) 125 copies (KL, 34-59, 111)

- 12 -

S/049/59/000/03/011/019

AUTHOR: Radzhabov, M. M.

TITLE: On the Accuracy of Determination of the Limiting Velocities From a System of Running Transverse Hodographs of Refracted Waves. II

PERIODICAL: Izvestiya Akademii nauk SSSR, [✓]Seriya geofizicheskaya, 1959, Nr 3, pp 450-459 (USSR)

ABSTRACT: The first part of this article was published in this journal Nr 12, 1958, where the method of determination of the limiting velocity V_r was described. In the present paper an analysis is made of the factors affecting the accuracy. The accuracy is found to depend on the dimensions of the base and on the angle (ϕ) of the inclination. If the base is greater than a certain minimum magnitude, then the degree of accuracy is improved. Therefore a base should be chosen so that it is greater than the minimum magnitude

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S/049/59/000/03/011/019

On the Accuracy of Determination of the Limiting Velocities From
a System of Running Transverse Hodographs of Refracted Waves. II

permissible for the greatest values of V_c employed in the calculations. Fig 1 shows the isolines of the relative error $\delta V_c/V_c$ as a function of the length of the base $\Delta(\Delta x)$. Figs 2 to 5 show the variations of the error in relation to ω_R , L/R_1 and R_2/R_1 (these quantities are defined in Part I). Fig 6 gives the transverse hodographs of refracted waves for various values of the angle ω_R , while Fig 7 shows the curves $\Delta t = \Delta t(\Delta x)$ for the above hodographs. There are 7 figures, 3 tables and 4 Soviet references.

ASSOCIATION: Turkmenskiy geofizicheskiy trest "Turkmengeofizika"
(Turkmenian Geophysical Board "Turkmengeofizika")

SUBMITTED: July 30, 1957
Card 2/2

SOV/49-59-7-13/22

AUTHOR: Radzhabov, M. M.

TITLE: On Some Properties of the Transverse Hodographs of Refracted Waves

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1959, Nr 7, pp 1046-1051 (USSR)

ABSTRACT: The experimental hodographs obtained from the seismic observations by a correlation method are discussed. The refracted waves in the case of one inclined discontinuity are considered. The dislocation of the minimum point x_{\min} of the transverse hodograph (defined by Eqs (1) and (2)) in respect to the projected point of the detonation is related to the time rate τ and to the angle of inclination φ of the refracting layer. The minimum of the transverse hodograph is defined by Eq (4) for the conditions $\partial t / \partial x = 0$. As an example, Fig 1 shows a relationship

$$x_{\min}/R = f(\omega_R)$$

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SOV/49-59-7-13/22

On Some Properties of the Transverse Hodographs of Refracted Waves
for $V_1/V_g = 0.5$ (R - distance from the detonation point,
 ω_R - azimuth, V_1, V_g - velocities in the upper and lower
layers, respectively). The analysis of Eq (4) shows that
the relationship x_{\min}/R increases with an increase of φ
and reaches its limiting value when $\omega_R = 0$, or gradually
decreases when $\omega_R \rightarrow 90^\circ$ and becomes zero when $\omega_R = 90^\circ$.
Fig 2 illustrates the value of x_{\min}/R in relation to
 $n = V_1/V_g$ when $\omega_R = 0$. Fig 3 shows the curves of the
theoretical difference hodograph (expressed as Eq (9)) for
 $n = 0.375$, $R = 8$ km. These curves illustrate the order
of disappearance of the minimum in relation to an increase
of the angle φ . The character of the theoretical diff-
erence hodographs in relation to the distance R , when
 $\omega_R = 0$ and $i = \varphi = 22^\circ$, is shown in Fig 4. The relation-
ship of the time rate τ and the angle φ can be deter-
mined from Eq (10). The angle φ can be determined from
Eq (12) if the value of n is not too large ($n \leq 0.8$).

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SOV/49-59-7-13/22

- On Some Properties of the Transverse Hodographs of Refracted Waves

The error of calculation in this case can be kept within the practical limits but it becomes large if $n > 0.8$.
There are 6 figures and 4 Soviet references.

ASSOCIATION: Turkmenskiy geofizicheskiy trest "Turkmengeofizika"
(Turkumen Geophysical Trust "Turkmengeofizika")

SUBMITTED: September 5, 1957.

Card 3/3

S/165/60/000/004/006/012
A104/A129

Authors: Agranovskiy, L.Ye., Radzhabov, M.M.

TITLE: Prospecting by the correlation method of refracted waves on the southern slope of the Kara-Kum Plateau

PERIODICAL: Akademiya nauk Turkmensoy SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 4, 1960, 46-52

TEXT: The advantages of the correlation method of refracted waves (KMFV) for the prospecting of the Kara-Kum Plateau are discussed. The latter gained special interest after rich gas wells were struck in the alpine deposits of the central region near Darvaza, Shikh, Serdy, Zaved. The southern slope of the Kara-Kum is covered with a wide stratum of fine to medium-grained micaceous sand, interspersed by clay layers. Ground waters occur in depths of 5 - 50 m. KMFV registered a number of refracted waves corresponding to different strata bedded within Tertiary deposits in carbonaceous Cretaceous rocks and below these. Boundary velocities of the most intensive waves are shown in Table 1. A comparison of stratum velocities to boundary velocities shows that the latter exceed the former by 1.2 - 1.6. This sharp differentiation renders the KMFV method

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S/195/50/000/004/006/012
A104/A138

Prospecting by the correlation method ...

eminently suitable for investigations of structural and regional problems in this area. KMFV investigations comprised longitudinal and transverse profiling and were carried out by 26-channel (C-26-51-D) stations. Maximum frequency response of modified amplifiers was reached at 25 cps. Station CП-48 (3FL48) seismographs with a natural frequency of 25-27 cps acted as receivers of electric oscillations. The distance between profiles varied from 5 to 1.5-2 km. The net of profiles formed close polygons at a maximum perimeter of 40 km. Experimental data proved that the waves corresponding to basic refraction boundaries are distinguished by recording stability, unbroken phase correlation and extensive tracing ranges. The seismic profiles based on hodographs were compiled according to t_0 and time fields laid down by G.P. Gamurtsev (Ref. 1: "Korrelatsionnyy metod prelomlennykh voln" [Correlation method of refracted waves], Akademizdat, 1952). The method was applied to 1-1.5 m deep refracting boundaries; deeper boundaries were shown with the help of time fields and ray diagrams with due consideration to the vertical mean velocity gradient. The relative error $\Delta H/H$ at the determination of the depth of boundary lines due to inaccurate determination of boundary velocity V_r is calculated according to:

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S/165/60/000/004/006/012
A104/A129

p... Prospecting by the correlation method ...

$$\Delta H/H = \frac{V \sqrt{1-n^2}}{\sqrt{1 - \left(\frac{n}{1 + \frac{\Delta V_r}{V_r}} \right)^2}} - 1,$$

$n = \bar{V}/V_r$, $\Delta V_r = V_r - V_{eff}$ (ΔV_r - absolute error in the determination of velocity V_r).
The Izgant Fold revealed refracted strata bedded in Tertiary and upper-Cretaceous deposits; it forms a sub-latitudinal brachyanticline. The structure of Kazy has been prepared for deep drilling. The structural layout was traced along the refracting stratum with $V_r = 5,500 - 5,700$ m/sec and bedded in Cretaceous deposits. Two further not defined structural complexes were revealed north-west of Kazy; their presence appears to confirm the theory of Yu.N. Godin (Ref. 2: "Glubinnoye geologicheskoye stroeniye Turkmenii i yego izucheniye geofizicheskimi metodami" [Plutonic geological formations of Turkmenia and the exploration by geophysical methods], 1959) on the existence of a Tuarkyr - Karatakshinskiy Bank. Described explorations provide the basis for further prospecting of sloping structures by the KMPV method in the region of Southern Kara-Kum. There are 5 figures, 1 table and 5 Soviet-bloc references.

Card 3/4

Prospecting by the correlation method ...

S/165/60/000/004/006/012

A104/A129

ASSOCIATION: Upravleniye geologii i okhrany nedr pri Sovete Ministrov Turkmen-skoy SSR (Administration of Geology and Protection of Mineral Re-sources in the Council of Ministers of the Turkmen-skaya SSR)

SUBMITTED: March 1, 1960

Район работ	Обозна- чение волны	V_r (м/сек.)
a)	b)	c)
Изгонт	t_2	3200—3400
	t_3	3900—4000
	t_4	4500—4600
	t_5	6400—6500
Казы	t_1	2600—2700
	t_2	3200—3300
	t_3	5500—5700

Table 1: Boundary velocities of refracted waves

- a) Area
- b) Design waves
- c) V_r (m/sec)

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86205

9.9865
3.9300

S/049/60/000/006/005/005/XX
E191/E381

AUTHORS: Radzhabov, M.M. and Agranovskiy, L.Ye.

TITLE: Determination of the Depth and Profile of the
Separation Boundary from the Individual Transverse
Hodographs of Refracted Waves

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya
geofizicheskaya, 1960, No. 6, pp. 854 - 862
+ 2 plates


TEXT: The problem of determining the profile of the refracting
boundary from the individual transverse hodograph is considered
for the case of a single flat inclined separation boundary.
Formulae are given for determining the depths of the
refracting boundary in the immersion zone from the individual
transverse hodographs of refracted waves at each point of the
profile. The errors in the determination of the effective
depths of the refracting boundary in the immersion zone are
considered. The accuracy of the determination of the profile
of the refracting boundary in the immersion zone is formulated.
Examples of experimental data are given. It is shown that
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E191/E381

Determination of the Depth and Profile of the Separation
Boundary from the Individual Transverse Hodographs of
Refracted Waves

only in the case of a straight line transverse profile orientated across the direction of the spread of the refracting boundary and on condition that the separation boundary along the perpendicular line is horizontal, does the individual transverse hodograph of the refracted wave at given values of the velocities in the top layer and the refracting layer offer the possibility of determining the depths at each point of the line of observation. Under actual conditions, these requirements are satisfied adequately in the exploration of structural elements of the type of an inclined monocline layer. In all other cases, additional data are required apart from the values of the velocities. When these data are known, the formulae given permit the plot of the boundary of separation, also in the case when the boundary velocity in the refracting layer varies along the



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Determination of the Depth and Profile of the Separation
Boundary from the Individual Transverse Hodographs of
Refracted Waves

line of the transverse profile. The conditions for which the
errors in the depth determination do not exceed 5% are given.
If the plot obtained from the transverse hodograph of refracted
waves yields a curvilinear shape, this is due to the nature
of the profile of the refracting boundary in the immersion zone
of seismic beams. Experimental data obtained in this study
are in agreement with the theoretical analysis.
There are 9 figures, 1 table and 14 Soviet references.

ASSOCIATION: Geofizicheskaya ekspeditsiya No. 2
Upravleniya geologii i okhrany nedr pri
Sovete Ministrov Turkmeniskoy SSR
(Geophysical Expedition No. 2, Directorate for
Geology and Conservation of Mineral Resources
of the Council of Ministers of the Turkmenian SSR)

SUBMITTED: September 26, 1959
Card 3/3

RADZHABOV, M.M.

Selection of mean velocities in determining effective depths
by single transverse hodographs of refracted waves. Izv. AN
SSSR, Ser.geofiz. no.6:863-867 Je '60. (MIRA 13:6)
(Seismometry)
(Prospecting--Geophysical methods)

S/169/62/000/007/035/149
D228/D307

AUTHOR: Radzhabov, M. M.

TITLE: Trial application of cross profiling in the correlation refraction method during seismic surveys in Central Asia's western part (Discourse theses)

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 7, 1962, 23, abstract 7A152 (V sb. Sostoyaniye i perspektivy razvitiya geofiz. metodov poiskov i razvedki polezn. iskopayemykh, M., Gostoptekhizdat, 1961, 321-322)

TEXT: The correlation refraction method is being applied in Central Asia's western part to study the Paleozoic basement surface and the dissection of the sedimentary strata, to map faults and other tectonic disturbances, and also (in recent years) to seek and outline local structural forms. Cross (non-longitudinal) profiling, too, is being widely employed together with longitudinal profiling when solving these problems. An important quality of cross profiling in the correct choice of distances from the deto-

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Trial application of ...

S/169/62/000/007/035/149
D228/D307

nation point is the small extent or absence of zones of refracted wave interferences. The principle of the overtaking travel-time curve was introduced into the cross profiling procedure; this allowed the means of interpreting the data of this method to be developed substantially. Ways of determining the boundary velocities, and of monitoring and identifying the waves corresponding to various horizons, have also been developed, as has a method of quantitatively processing the amplitudes. The accumulated experimental material testifies that the accuracy of the results has been increased, and that the range of solvable problems has been expanded, in consequence of the use of cross hodograph systems. [Abstracter's note: Complete translation.]

Card 2/2

RADZHABOV, M.M.

Investigating amplitude curves of refracted waves in observations on transverse profiles. Izv.AN Turk.SSR.Ser.fiz.-tekhn., khim.i geol.nauk no.1:26-32 '61. (MIRA 14:8)

1. Upravleniye geologii i okhrany nedr pri Sovete Ministrov Turkmenkoy SSR.

(Seismic prospecting)

RADZHABOV, M.M.

Kinematic criteria for the identification of refracted waves in a region of overlapping transverse hodographs.

Izv. AN SSSR. Ser. geofiz. no.5:718-727 My '64.

(MIRA 17:6)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefi.

and the other two.

determining the boundary coefficient of the system of the test
level in observations of the transfer profile. (see. 10.10. 10.11.
see. 10.10. 10.11. 10.12. 10.13. 10.14. 10.15. 10.16. 10.17.

. The system of the test level is determined by the test level of the
system.

ALIYEV, A., RADJABOV, M.M., TERESHKO, D.L.

new geophysical data on the structure of crystalline basement
in the region of the Araks and Kura junction. Izv. AN Azerb.
SSR. Ser. geol.-geog. nauk no.3:12-16 '65. (MIRA 18:9)

L 32825-66 EWT(1) GW

ACC NR: AP6010067 SOURCE CODE: UR/0387/66/000/003/0083/0090

AUTHOR: Radzhabov, M. M.; Babazade, O. B.

ORG: Azerbaydzhani Scientific-Research Institute on Petroleum Extraction (Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefli)

TITLE: Reflected-diffracted waves recorded during deep seismic sounding of the Earth's core [Paper presented at a Session of the Council on Seismology, AN SSSR, and the Scientific Council of the Institute of Physics of the Earth, AN SSSR, in Moscow on 9 May 1964]

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 3, 1966, 83-90

TOPIC TAGS: seismic wave, seismology, reflected shock wave, petrology, shock wave diffraction

ABSTRACT: This article presents some of the results of an experimental investigation of diffracted waves from data collected by the Azerbaydzhani Scientific-Research Institute on Petroleum Extraction (Azerbaydzhanskiy nauchno-issledovatel'skiy institut po dobyche nefli). The data are interesting from the viewpoint of the possibility of employing these waves in combination with other classes of recorded waves in the separation of blocks in the crystalline mass of the Earth and location of zones of deep faults which divide these blocks. Many reflected-diffracted types of diffraction waves were isolated during the analysis of the wave field on the sector of the profile of deep seismic sounding which intersects, in the

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ACC NR: AP6010067

submeridional direction, the zone of the Talysh-Vanda gravity high in the Kura Depression. It is shown on the basis of experimental data that the intensity of these waves is considerably higher than that of the frontal waves recorded in the first entry, and higher than or comparable to the reflected waves recorded in subsequent entries. The existence of a high in the form of an amplitude graph $\Lambda = \Lambda(y)$ is established; it coincides with the region of the low of the hodograph of the diffraction wave. It is shown that the amplitudes of the waves diminish sharply away from the region. Because of this these waves are separated visually only within a single spacing of the seismographs, and it is not possible to track them on the neighboring spacing. It is established that the diffraction point region is situated on the joints of rocks which differ in their petrographic composition. Orig. art. has: 6 figures and 8 formulas. [08]

SUB CODE: 08 / SUBM DATE: 17Nov64 / ORIG REF: 005

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SECRET, No. 1.

21451

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Petrography of vein rocks in the southwestern part of the Kengur-
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"The history of the Soviet school in Uzbekistan (1917-1941)." Academy of Pedagogical Sciences RSFSR. Sci Res Inst of the Theory and History of Pedagogy. Moscow, 1955. (Dissertation for the Degree of Doctor in Pedagogical Science)

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RADZHABOV, S. A.

3-12-5/27

AUTHOR: Radzhabov, S.A., Professor, Doctor of Juridical Sciences
Rector of the Tadzhik State University.

TITLE: October Opened the Way to Knowledge (Oktyabr' otkryl dorogu
k znaniyam)

PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 12, pp 32 - 38 (USSR)

ABSTRACT: The author states that the October Revolution opened the
way to culture and education for the Tadzhik people. Industry
and agriculture developed with enormous rapidity, and a new
socialist culture arose. A wide system of primary and second-
ary schools, technical and higher educational institutions
was organized. In 1956 there were already 2,547 schools of
general education where 320,400 pupils were trained. Large
sums were spent for the development of national education,
they amounted to 568.8 million rubles in 1956.

ASSOCIATION: Tadzhikskiy gosudarstvennyy universitet (Tadzhik State University)

AVAILABLE: Library or Congress

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ACC NR: AP6036039

SOURCE CODE: UR/0057/66/036/011/2069/2074

AUTHOR: Radzhabov, T.D.; Ivanovskiy, G.F.

ORG: none

TITLE: Ion pumping with a continually renewed sorbent surface

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 11, 1966, 2069-2074

TOPIC TAGS: sorption, inert gas, helium, argon, neon, krypton, xenon, ion beam, metal film, titanium, metal vapor deposition

ABSTRACT: The authors have investigated sorption of argon, helium, neon, krypton, and xenon from up to 8 μ A beams of 2-2.5 keV ions on titanium films during deposition of the film at rates from 3 to 50 $\text{\AA}/\text{min}$. The film was deposited from a direct current heated 22 mm diameter ring of 1.5 mm diameter titanium-molybdenum wire mounted 5 cm from the 7.08 cm^2 target. The substrate was outgassed for 10 minutes at 700° C under a vacuum of 10^{-7} torr. The ion beam was turned on after the titanium film had reached a thickness of 0.1-0.2 micron and was left on for 10 minutes in all the experiments. The substrate was not cooled and reached temperatures of 50-60° C during deposition. After the 10 minute sorption period the titanium film target was gradually heated to from 700 to 1000° C during the course of some 15 minutes and the quantity of desorbed gas was measured by recording the changes of pressure in the working volume. From a

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simple calculation it is concluded that the density of sorbed atoms in the growing titanium film is constant above the initial surface and equal to B/v , where B measures the intensity of the ion beam and v is the deposition rate of the film. The proportionality of the density to B/v was confirmed by the initial behavior of the desorption curves. The total quantity of desorbed gas decreased with increase of v ; this is ascribed to failure of the gas atoms sorbed deep in the target to diffuse to the surface during the short (15-20 minute) desorption time. Helium was desorbed at higher temperatures than the other investigated gases, and the gases whose atomic diameters exceed the lattice constant of the titanium target (krypton and xenon) were not desorbed at temperatures above 700°C . Orig. art. has: 4 formulas, 4 figures and 5 tables.

SUB CODE: 20 SUBM DATE: 16Jun65 ORIG.REF: 002 OTH REF: 004

Card 2/2

26334-66 EWT(l)/EWT(m)/EWP(t) IJP(c) AT/JD

ACC NR: AP6012500

SOURCE CODE: UR/0181/66/008/004/1271/1273

AUTHOR: Ivanovskiy, G. F.; Radzhabov, T. D.

ORG: none

TITLE: Variation in the resistance of titanium films during bombardment by argon ions

SOURCE: Fizika tverdogo tela, v.8, no. 4, 1966, 1271-1273

TOPIC TAGS: titanium, metal film, argon, ion bombardment, resistivity

ABSTRACT: The authors study the change in resistance of titanium films due to bombardment with monoenergetic ions of argon with energies from 0.8 to 4 kev at a current of less than 10 μ a. The titanium films were vaporized in a high vacuum on a molybdenum glass substrate and silver contacts were electrolytically applied. The resistivity of the film was measured as a function of thickness. The resistivity decreased with an increase in thickness, asymptotically approaching that of the massive metal at thicknesses greater than 1000 Å. The results show that argon ions are readily absorbed by titanium films at 20°C. The resistance of the films increases after bombardment. The change in resistance depends on the thickness of the film, as well as on the energy and number of bombarding ions. The change in resistivity reaches a maximum at energies of 2-2.5 kev, which corresponds to the level of sorption saturation. A sorption saturation level corresponding to the maximum change in resistance is also

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ACC NR: AP6012500

reached when the number of bombarding ions is increased. The interaction between argon atoms and titanium is apparently purely mechanical. Electron interactions between argon and titanium atoms either do not take place or are too weak to be registered. Argon ions which penetrate deep into the film and are distributed with depth according to some penetration probability may be treated as a purely mechanically introduced impurity which reduces the mobility of free electrons and thus increases the electrical resistance of the film. Orig. art. has: 2 figures, 1 table.

SUB CODE: 20/

SUBM DATE: 02Oct65/

ORIG REF: 002/

OTH REF: 005

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I 45918-66 EWP(1)/EWT(m)/EWP(L)/ETI/EWP(K) LJP(c) JD

ACC NR: AP6028621

SOURCE CODE: UR/0057/66/036/008/1469/1474

AUTHOR: Ivanovskiy, G.F.; Radzhabov, T.D.; Zagorskaya, T.N.

ORG: none

TITLE: Mechanism of the sorption of inert gas ions on titanium

SOURCE: Zhurnal tekhnicheskoy fiziki, v. 36, no. 8, 1966, 1469-1474

TOPIC TAGS: helium, argon, neon, titanium, polycrystal, single crystal, thin film, sorption, ion, METAL SURFACE

ABSTRACT: In order to elucidate the nature of the two-peak thermal desorption curves associated with the sorption of inert gas ions on pure metallic surfaces, the authors have investigated the sorption from 2 uA beams of 0.8 to 3 keV argon, neon, and helium ions on titanium surfaces. Titanium was selected for the investigation because of its technical importance in connection with high vacuum sorption pumps. Four types of targets were employed: 0.1 μ films deposited at 10 $\text{\AA}/\text{min}$ on copper substrates and having a grain size of 0.01 to 0.02 μm ; a dense sample with a grain size of 0.014 to 0.043 μm ; a coarse-grained polycrystalline material with a grain size of 0.5 to 1.0 μm ; and a single crystal obtained from titanium iodide by zonal melting in vacuum with an electron beam. The adsorbed ions were desorbed by heating the target to 900° C, and the desorbed atoms were detected and measured with a mass spectrometer and ionization gages. Two-peak desorption curves were obtained for all the gases and for all the targets ex-

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